Leicestershire County Council

Loughborough Area

Local Cycling and Walking Infrastructure Plan (LCWIP)

Encouraging and enabling our communities to travel actively for life

2023

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1. Introduction

Following the adoption of our Cycling and Walking Strategy and Action Plan in 2021, we are now in the process of developing Local Cycling and Walking Investment Plans (LCWIPs) for county towns and the urban areas surrounding Leicester City. These LCWIPs will set out the vision and priorities for cycling, walking and wheeling improvement in each of the areas to create attractive, coherent cycling and walking networks to help to encourage and enable our communities to travel actively for life.

This report sets out how we have developed an LCWIP for the Loughborough area, the evidence base which informed its development, and our first 10-year pipeline of priorities for improvement, as well as some concept ideas of how we could improve our highway spaces and places to help engage with our communities.

1.1 What is an LCWIP?

In essence, LCWIPs are a mechanism to help deliver transformational change in how we travel locally, helping to improve public health and the environment, reducing congestion, connecting our communities and creating cleaner, greener, happier places. They are developed in accordance with the process prescribed in national technical guidance (see section 1.2).

In practical terms, LCWIPs are long term infrastructure plans for investment, which set out the priority cycling and walking route networks for an area. They ensure that the greatest benefit is provided to the most people, to encourage and enable them to travel more actively. The plan will be used to secure funding for delivery of improvements and will evolve and be updated over time, reflecting new routes and priorities as schemes are delivered and new development provides opportunities for active travel.

LCWIPs were introduced in the Government's Cycling and Walking Investment Strategy (2017) as a key part of increasing the number of trips made by active modes such as walking, wheeling,[1] and cycling. They are a strategic approach to identifying priorities for active travel improvements in local areas and enable a long-term (10-year) approach to developing local cycling and walking networks.

LCWIPs will assist Local Authorities in:

- identifying infrastructure improvements and prioritising these for short, medium and long-term delivery,
- ensuring that cycling, walking and wheeling are given appropriate consideration in local planning and transport policies and strategies, and
- making the case for funding for future cycling, walking and wheeling schemes.

Although the term "LCWIP" only refers to cycling and walking, LCWIPs are about having a holistic approach to planning and design, resulting in plans that increase people's opportunity to choose all forms of active travel for their journeys. This covers walking and wheeling in many forms including bikes, trikes, e-cycles, scooters, and inclusive mobility such as adapted bikes and rollators.[2] The plans also consider provision for equestrian use where appropriate.

LCWIPs will be reviewed 3, 5, and 10 years after publication.

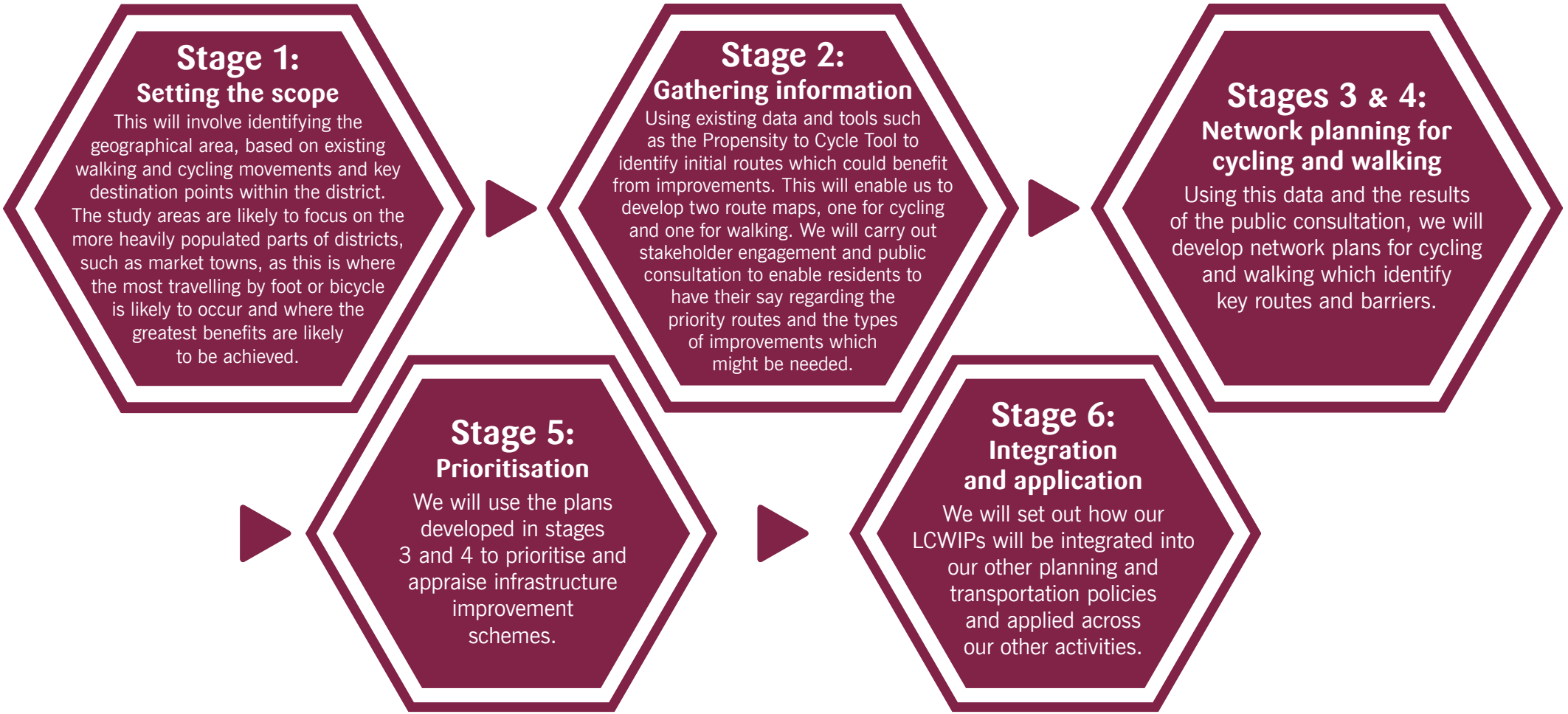
[1] The term 'wheeling' refers to people using wheeled mobility aids such as wheelchairs and mobility scooters, as well as people walking with pushchairs and prams.

[2] For more information about inclusive mobility, visit the Wheels for Wellbeing website.

1.2 The LCWIP development process

Each LCWIP will be developed following the process set out in the LCWIP technical guidance for local authorities, published by Government in 2017. The guidance supports the development of evidenced and meaningful plans for our communities, encouraging and enabling more cycling, walking and wheeling.

Figure 1.1 – The LCWIP process



1.3 Document structure

It is important that LCWIPs comply with the LCWIP technical guidance, as the documents will form the basis for future bids for public funding (i.e. funding from Government) to deliver cycling and walking infrastructure improvements. Below is a summary of the structure of this LCWIP and how it relates to the various stages of the process as set out in the LCWIP technical guidance:

- **Chapter 1** - Introduction. This section explains what an LCWIP is and the process for developing one.
- **Chapter 2** - Context. This chapter provides a summary of the wider national, regional, and local context within which our LCWIPs are being developed.
- **Chapter 3** - Scope and objectives. This sets out the geographical scope and objectives. (Stage 1 of the LCWIP technical guidance)
- **Chapter 4** - The current state of cycling and walking in Leicestershire and the LCWIP area. This chapter sets out our findings from the review of existing data. (Stage 2)
- **Chapter 5** - Developing our network plans. This explains the process that we went through to identify the network plans, including the public consultation and modelling which we have carried out to identify future key routes and barriers to walking and cycling. (Stages 3 and 4)
- **Chapter 6** - In this chapter, we set out how we assessed the priority networks to identify needs for improvements (stages 3 and 4), and went beyond the basic requirements of the LCWIP technical guidance by going the extra step and developing concept scheme ideas.
- **Chapter 7** - Prioritising the schemes and concepts. This chapter builds on chapter 6 to explain how we arrived at a prioritised list of schemes for the first ten-year LCWIP period. (Stage 5)
- **Chapter 8** - How we get from here to there. This chapter covers proposals for implementing the LCWIP, including timescales, future engagement, potential funding sources, and how the LCWIP will be integrated with other policies. (Stage 6)
- **Chapter 9** - Conclusion and next steps. This chapter summarises the immediate next steps which we will look to undertake to deliver the LCWIP.

The detailed technical work which has supported development of the LCWIP can be found on the LCWIP evidence webpage.

2. Context

LCWIPs are predominantly transport plans. However, like all transport plans, they are significantly influenced by non-transport issues such as the environment, health and wellbeing, and access to services such as education and jobs. Therefore, there are a wide variety of national and local policies and considerations which make up the context within which we have developed our LCWIPs.

2.1 National context

2.1.1 Active Travel England

Active Travel England was established in 2022 as an executive agency, sponsored by DfT. Its main objective is for 50% of trips in England's towns and cities to be made by walking, wheeling, and cycling by 2030. Its ambition is that cycling, walking and wheeling will become the preferred choice for everyone travelling in England.

The organisation offers expertise in scheme design, implementation, and stakeholder management. Its role is to work with local authorities to:

- deliver quieter roads and neighbourhoods, which give people an alternative to driving,
- put active travel at the heart of towns and cities,
- ensure that active travel is embedded in major new developments,
- provide the tools to deliver ambitious walking, wheeling, and cycling programmes, including training in active travel delivery best practice, and
- improve active travel safety, including developing new solutions and providing guidance on safe infrastructure design.

However, its most significant function is to assess local authorities' walking, wheeling, and cycling schemes and dispense Government funding to enable delivery of new and improved infrastructure, ensuring that investment delivers schemes which meet new, high, national standards.

2.1.2 National policy

National policies, such as Gear Change – A Bold Vision for Walking and Cycling, the Net Zero and Clean Air strategies, and the Cycling and Walking Investment Strategy (CWIS), have influenced the development of our Cycling and Walking Strategy (CaWS) and Action Plan.

Figure 2.1 illustrates the key national policies which have influenced the development of this LCWIP, in addition to those which influenced the development of the CaWS.

Figure 2.1 – National policy relevant to LCWIPs

2.2 Leicestershire context

Leicestershire is made up of a ring of seven districts – Blaby, Charnwood, Harborough, Hinckley and Bosworth, Melton, North West Leicestershire, and Oadby and Wigston – with Leicester City at its centre. Leicestershire County Council is the highway authority for all of the roads in Leicestershire, excluding the strategic road network, which is managed by the strategic highway authority (currently National Highways), and roads in Leicester City, which are managed by Leicester City Council. The population of Leicestershire is over 700,000 people, of which approximately 55% live in rural areas.

2.2.1 Local policy

Figure 2.2 illustrates the key local policies which have influenced the development of this LCWIP, in addition to those which influenced the development of the CaWS.

Figure 2.2 – Local policy relevant to the Loughborough LCWIP

2.2.2 Other local authorities

Leicestershire is a two-tier authority. This means that certain functions, such as transport and waste disposal, are managed by Leicestershire County Council, whilst other functions such as air quality monitoring and town planning are managed by the seven district councils listed in 2.2, above.

Leicester City is the responsibility of a single tier authority, Leicester City Council, which carries out all of the functions which are split between the district and county councils in Leicestershire.

2.2.2.1 District local plans

Local plans are important documents, which set out the district councils' plans for managing and improving the local area in their role as local planning authorities.

Part of the role of local plans is to allocate sites for major housing, employment and other development, and identify the infrastructure needed to support them. This includes changes to transport infrastructure, which is needed to support both new development ambitions, and other Local Plan targets, such as those relating to the environment and health.

The major developments which are included in the existing local plans at the time at which this LCWIP was developed were taken into account during the development of the LCWIP. We also considered other Local Plan objectives which can be affected by how people travel, such as health and environmental targets.

Leicestershire County Council is a statutory consultee for local plans. We will use this role to ensure that the LCWIP priorities and plans for future LCWIPs are acknowledged in the development of future Local Plan documents as appropriate.

2.2.2.2 District Council LCWIPs

Some district councils may decide to also develop individual LCWIPs for their districts. These may focus on more priorities at a local level, whilst Leicestershire County Council (LCC) LCWIPs focus on delivering connected priority networks in our towns and most urban areas. However, it is expected there will be strong synergies with aims and ambitions, due to all authorities following the DfT process and guidance for developing LCWIPs and the continued productive partnership engagement between councils.

We have engaged with the district councils, to ensure that their valuable views were considered in the development of this LCWIP (see Chapter 5). We have also aimed to align our priorities with those of the district councils where appropriate. We will review this alignment when we review the overall LCWIPs 3, 5, and 10 years after publication.

We will also engage with the district councils as they develop their own LCWIPs to ensure that, where appropriate, our respective plans and priorities continue to align and complement each other.

2.2.2.3 Leicester City Council

Leicester City is an important start and end point for many journeys in Leicestershire, particularly for people travelling into and out of the urban areas around Leicester. Therefore, it will be important for cycling, walking and wheeling networks to form coherent routes, where possible.

You can read more about how we will engage with other local authorities during delivery of our LCWIPs in section 8.3.

3. Scope and objectives

We decided that developing a single LCWIP covering the entire County would not be appropriate to manage the diverse needs of county towns, urban areas adjoining Leicester City, and rural areas. Instead, as outlined below, we developed a programme of LCWIPs, driven by the LCWIP guidance, evidence, and the differing natures of the areas themselves.

3.1 Identifying the programme and geographical scope of our LCWIPs

The LCWIP guidance states that the distances within which cycling, walking and wheeling have the potential to reduce private car travel should be considered when developing the geographical scope of LCWIPs. These distances are typically up to 10km for cycling, and up to 2km for walking. The guidance also states that local authorities should consider the density and number of services and facilities to which people want to travel when defining the geographical boundary of the LCWIP.

In counties such as Leicestershire, the greatest amount of cycling, walking and wheeling takes place in urban areas, rather than rural settlements and villages. This is because towns and urban areas are more densely populated and have a greater number of services and facilities within a short distance conducive to choosing active travel. Therefore, we focused on developing LCWIPs for the towns and urban areas in Leicestershire.

The boundaries for the towns and urban areas were defined according to the Office of National Statistics Lower Super Output Areas[3] (LSOAs). In some places, the close proximity of adjoining urban areas was considered to have the potential to influence active travel. We expanded the boundaries of these areas, to maximise the benefits of LCWIPs to communities. This included expanding the Urban Fringe boundaries around Leicester, to create North of Leicester and South of Leicester LCWIP areas.

This gave us the following priority areas for consideration (in alphabetical order):

- Ashby-de-la-Zouch
- Coalville
- Hinckley
- Loughborough and Shepshed
- Lutterworth
- Market Harborough
- Melton Mowbray
- North of Leicester
- South of Leicester

[3] Lower Super Output Areas are areas which comprise between 400 and 1,200 households and have a usually resident population of between 1,000 and 3,000 people.

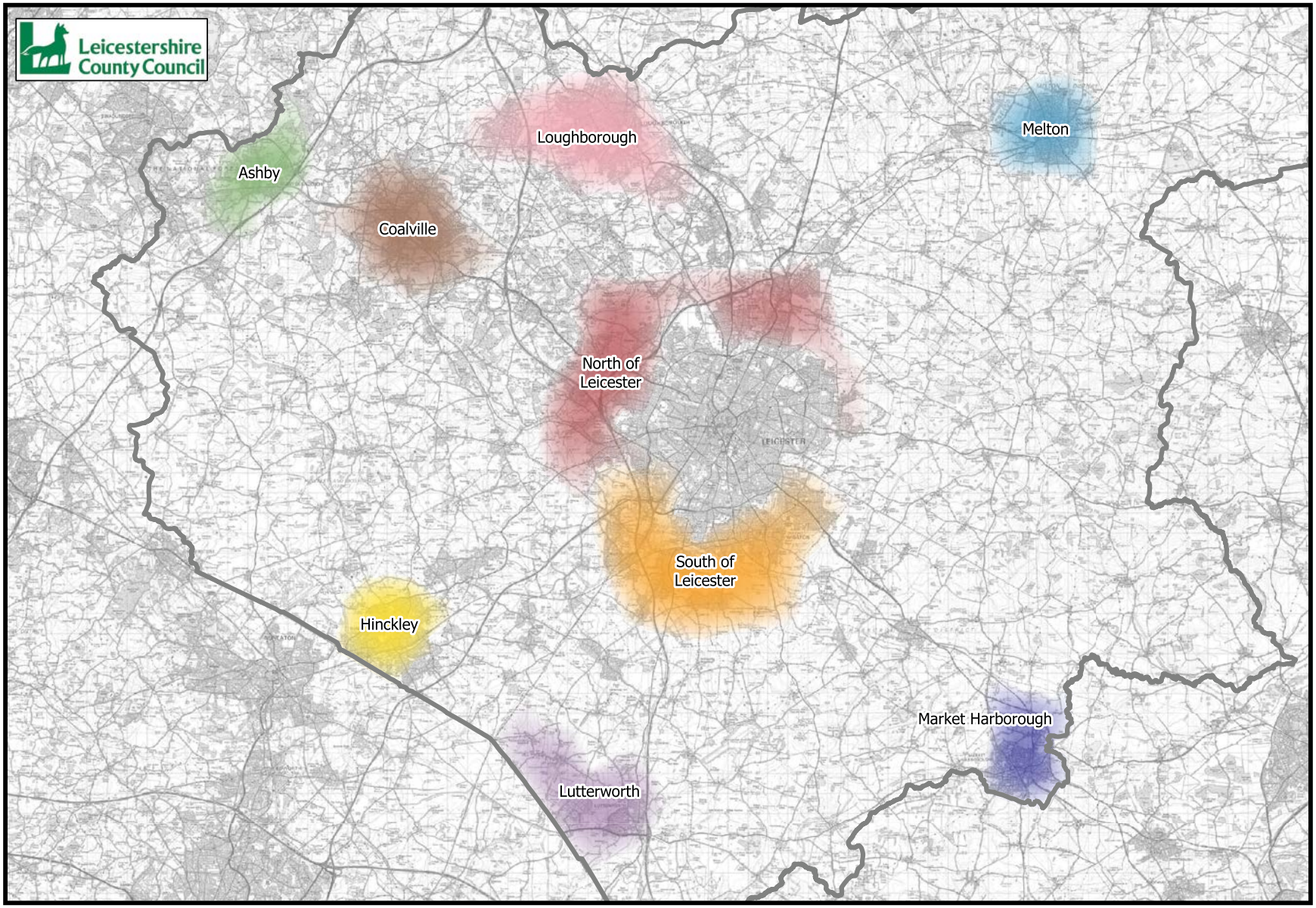


Figure 3.1 – Map of LCWIP areas

3.2 Prioritising the LCWIP areas

After fully considering the requirements of the LCWIP guidance, we identified that developing LCWIPs for all of the identified areas in tandem would be unwieldy, and likely to result in poorer quality LCWIPs. Instead, we decided to prioritise the areas and focus on developing 2 LCWIPs per year.

The development of high-quality evidence led LCWIPs takes time and resources. Therefore, the number of LCWIPs developed per year must also be balanced in consideration of the other financial pressure on the authority's budgets. This approach enables us to develop higher-quality evidence led LCWIPs in an affordable manner and deliver our first LCWIPs earlier.

The LCWIP guidance recommends that, where local authorities are developing multiple LCWIPs, priority should be given to those which have the greatest potential for growing cycling and walking trips.

Prior to the publication of Gear Change and LTN1/20, we had been developing an LCWIP as part of a DfT pilot project. This project provided valuable insight and experience into understanding:

- how people travel,
- the potential benefits of increasing cycling and walking in an urban area, and
- the fundamentals of what makes a good LCWIP aligned to Government aspirations.

This pilot area was considered alongside the other identified areas, to ensure that the delivery of LCWIPs prioritises those which have the greatest potential to deliver benefits.

A review was undertaken of the cycling and walking travel based on 2011 Census[4] data, and cycle count data where available, to establish the current level of cycling and walking travel in each of the remaining areas. A high-level analysis was then carried out of the potential for areas to benefit from increased cycling and walking, based on DfT best practice. As part of this work, several factors were considered, including:

- the DfT's Propensity to Cycle Tool, an open source, online tool for estimating cycling potential and health/CO2 benefits,
- the number of road traffic collisions involving cyclists or pedestrians,
- sociodemographic factors, including population age and gender profiles, access to a car, and deprivation,
- planned future developments, and
- the presence of Air Quality Management Areas.

We also looked at the number of key attractors within the likely cycling and walking distances of 10km and 2km respectively. These are places to which people want to travel, including schools, supermarkets, healthcare facilities, and places of leisure such as libraries, parks, and visitor attractions.

These criteria were weighted, with strongest weighting being given to collisions, the number of key attractors, the Propensity to Cycle analysis, and the sociodemographic profile of the area.

The areas were ranked based on their relative performance against each of the individual metrics, including our understanding of the relative potential benefits in the pilot LCWIP area. We then used an average of the individual rankings, weighted as set out above, to create a final priority order.

Perhaps unsurprisingly, given their population densities, the Loughborough and Urban Fringe South of Leicester areas consistently scored highly across all of the metrics. This meant that they were highest priority areas for development in our first phase of LCWIPs.

[4] 2021 Census data was not available at the time of developing the geographical scope. It will be taken into consideration as part of the LCWIP 3-year reviews.

3.3 The Loughborough LCWIP area

The Loughborough LCWIP area covers the main urban and inter-urban areas around the towns of Loughborough and Shepshed, in Charnwood district. The topography of the area is mostly flat. However, there are some steep gradients in some areas which could be challenging for cyclists. For example, Loughborough University Campus. There are also numerous physical barriers with limited crossing points, including rivers, canals, railway lines, and heavily trafficked roads, as shown in Figure 3.7, below. These often lengthen the routes which people have to take to reach their destinations, and make travelling by cycling, walking and wheeling less attractive.

Based on 2021 Census data, the study area has an overall population of approximately 88,000.

Loughborough is the largest town outside of the City of Leicester, and is the only university town in Leicestershire. At the time of the 2021 Census, the town was home to just under 65,000 people. As a university town, it has a high student population. This has an impact on travel patterns, with particular concentrations of travel to and from the University, which is also a significant employer in the town.

The nearby town of Shepshed is considerably smaller, with a population of 14,875 recorded in the 2021 Census. It has a long history of transport links to Loughborough, including a canal in the 19th Century and a railway line providing passenger services until 1931 and freight services until 1963. These links have left their mark on the area, including shaping the routes of some of the modern roads and footpaths.

The village of Quorn is the nearest service centre to Loughborough. The estimated population at the time of the 2021 Census was just under 6,000 people. The village is bounded on the east by the A6, which also connects it to Loughborough.

Loughborough railway station provides the major link to rail travel in the district. The A6 runs through the East of the LCWIP area, providing a major route through Charnwood and connecting Loughborough to Leicester, while the M1 runs through the West of the LCWIP area, severing Loughborough from Shepshed and providing the area's main connection to the Strategic Road Network.

Figure 3.2 – Proportion of the population of Charnwood Borough by age[5]

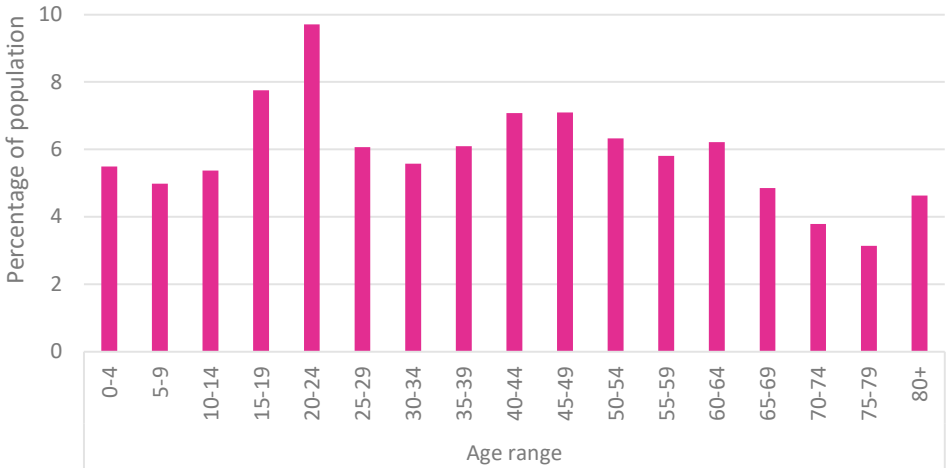


Figure 3.3 – Proportion of reception and year 6 age children in Charnwood Borough who are classified as overweight or obese[6]

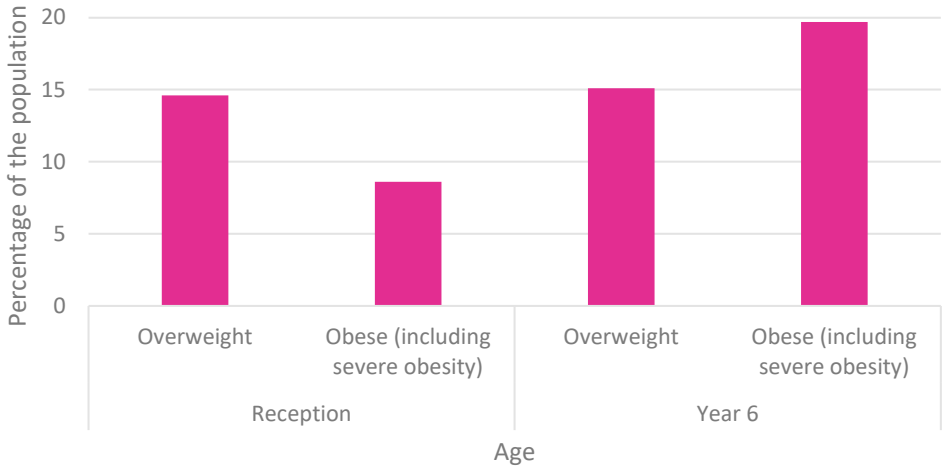
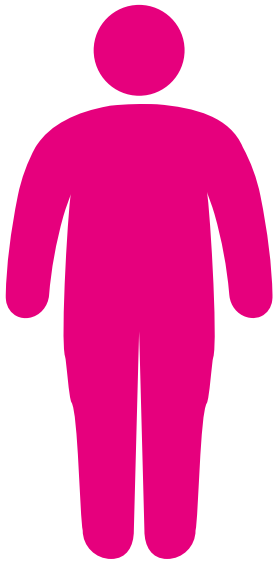


Figure 3.4 – Proportion of adults in Charnwood Borough who are classified as overweight or obese[7]



62.6% of **Loughborough residents** are classified as **overweight** or obese

[5] Percentages may not total 100% due to rounding. Source: Office of National Statistics (2011 Census).

[6] Source: Public Health England data, 2021.

[7] Source: Public Health England data, 2021.

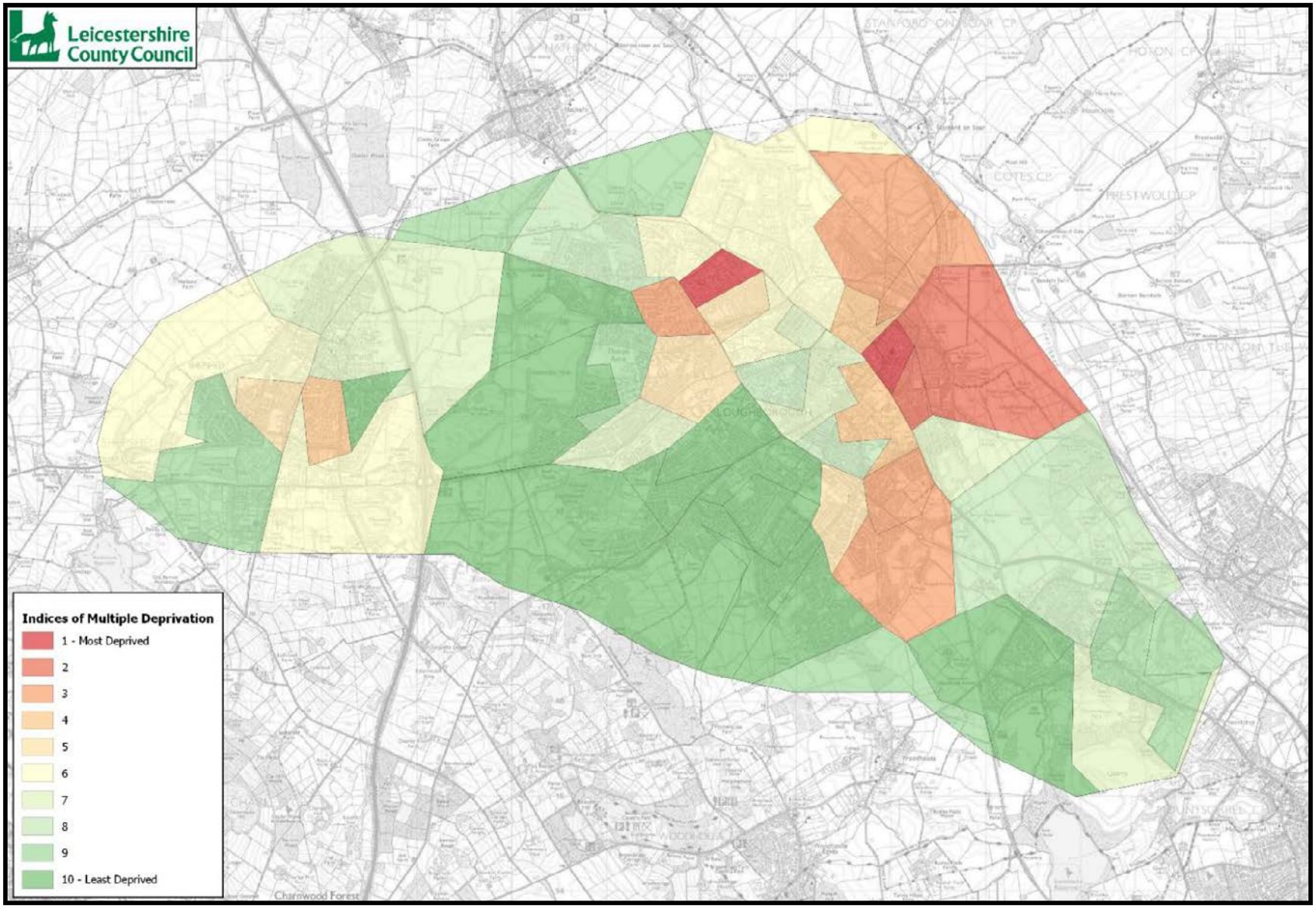


Figure 3.5 – Areas of deprivation in the Loughborough LCWIP area

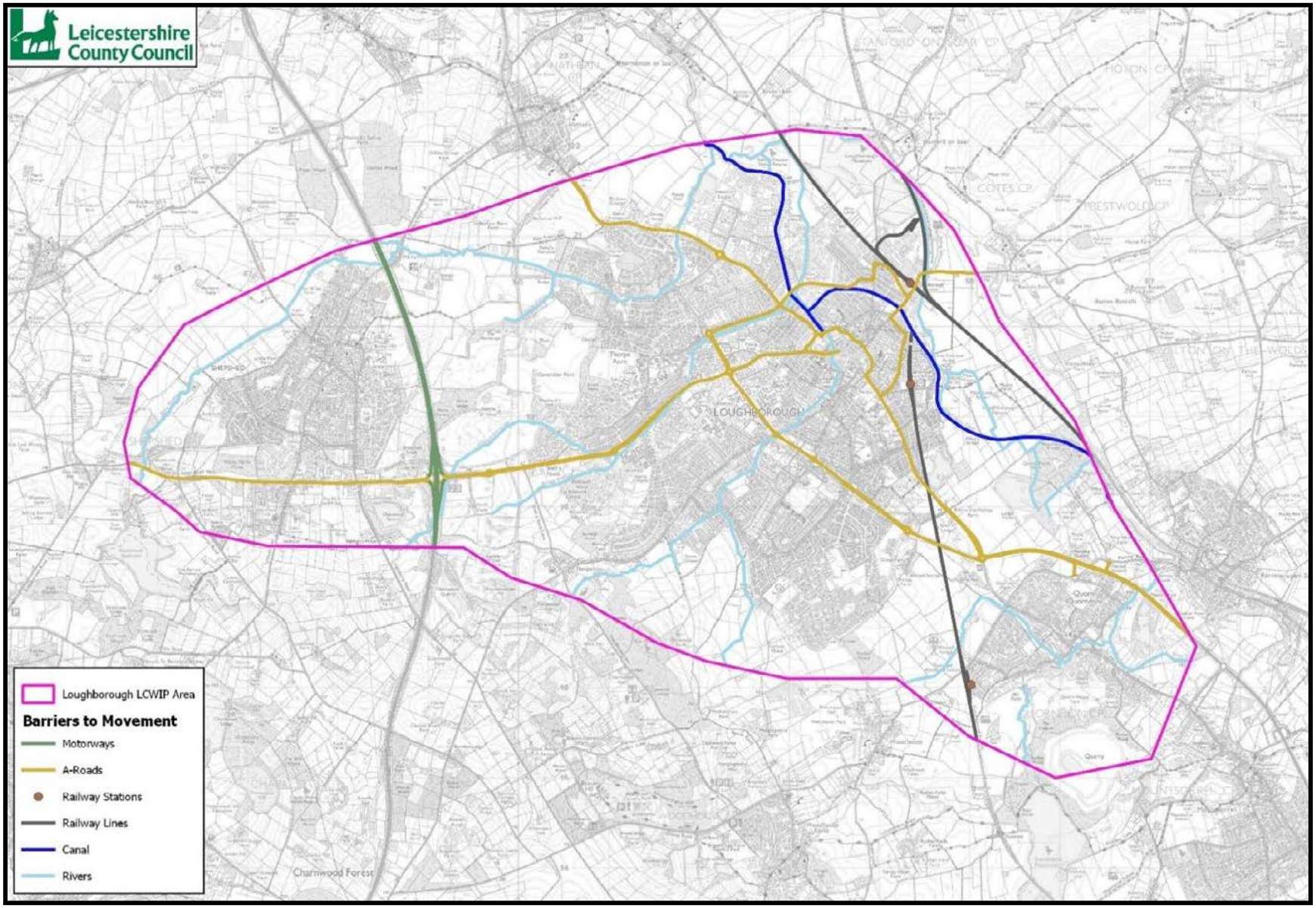


Figure 3.6 – Major physical barriers to travel by cycling, walking and wheeling in the Loughborough LCWIP area

3.4 Objectives

Each LCWIP is expected to contribute towards the objectives of our Cycling and Walking Strategy (CaWS) and national 'Gear Change' cycling and walking plan, as well as objectives which are more specific to the LCWIP local area.

The CaWS objectives are:

1. **To enhance the infrastructure that supports cycling and walking in Leicestershire.**
2. **To enable people to cycle and walk in Leicestershire.**
3. **To inspire a step change in cycling and walking in Leicestershire.**

In addition to the CaWS objectives, we have used the feedback received from engagement activities (see 5.2, below), combined with demographic information, to identify important issues for local residents and the area as a whole. These have informed our development of objectives specific to the Loughborough LCWIP:

1. **To reduce severance across and between Loughborough, Shepshed, and Quorn.**
2. **To improve perceptions of cycling, walking and wheeling as safe ways to travel.**
3. **To improve connections to key residential and employment areas, including Loughborough University Science and Enterprise Park, Bishop Meadow and Gelders Hall industrial estates, the various University Halls of Residence, and Garendon Park.**
4. **To improve active travel connections to Loughborough University.**
5. **To improve active travel connections to Loughborough Railway Station.**

4. How people travel in the Loughborough LCWIP area

4.1 Travel to work and education

4.1.1 Travel to work

According to 2011 Census data, although a high proportion (40.5%) of people working in Loughborough already travel by cycling or walking, over 50% travel by car. By contrast, only 27% of people from Shepshed travel by cycling or walking, and 63% by car.

Approximately 67% of residents in Loughborough and Shepshed also work there. Only 16% of people working in the LCWIP area commute in from the wider Charnwood Borough area.

There are also a large number of trips under 10km (the DfT limit for trips which could be made by cycling) which are currently made by car during commuting hours, particularly in the town centre. 57% of journeys to work in Loughborough and 42.2% of journeys to work in Shepshed are 10km or shorter. This suggests that there may be considerable scope to encourage people who currently commute by car to switch to cycling or walking instead. However, the high proportion of people who travel to work by car in Shepshed indicates that barriers to walking and cycling may be greater there.

Figure 4.1 – Journeys under 10km as a percentage of all travel to work (2011 Census)

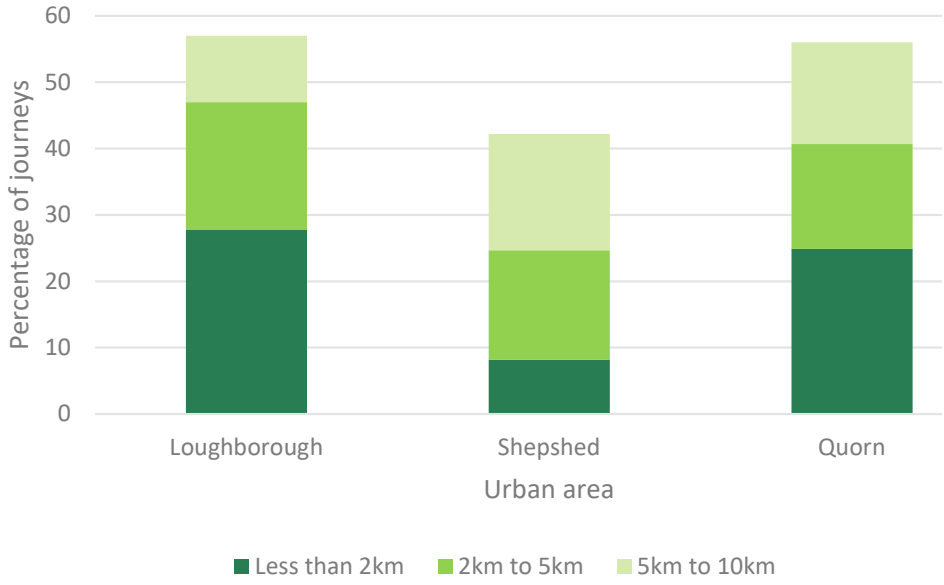
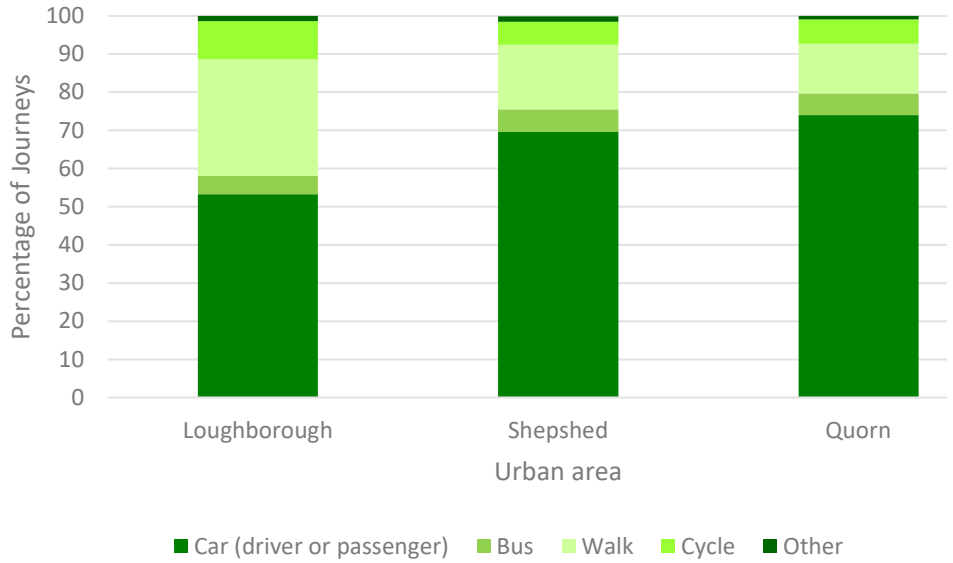


Figure 4.2 – Journey to work by mode in the Loughborough LCWIP area[8]



[8] Percentages may not total 100% due to rounding.

[9] Cycling UK's Cycling Statistics, Cycling UK, May 2023

4.1.2 Travel to education

The Department for Transport's National Travel Survey identified that 11% of 16-24 year-olds cycle at least once a week for travel purposes, as opposed to for fitness or leisure. This is followed by 25-34 year-olds and 35-44 year-olds, both at 8%. These age groups account for 47% of the Loughborough LCWIP area population.

Cycling UK's Cycling Statistics report[9] identified that full-time students are more likely to cycle at least 3 times a week, compared to people with occupations. The presence of Loughborough University in the LCWIP area means that there is a high proportion of residents in the 16-19 and 20-24 year age groups (8% and 14% respectively). This suggests that there could be good scope to encourage walking, wheeling and cycling travel to higher education.

4.2 The existing cycling, walking and wheeling networks

The figures below show the cycling and walking networks in the Loughborough LCWIP area as they were prior to the development of this LCWIP. This includes:

- designated Public Rights of Way (including public footpaths and bridleways),
- off-road segregated cycle tracks,
- on-road non-segregated cycle lanes,
- shared bus lanes, and
- the National Cycle Network Route 6.

Low-usage footways, such as those linking housing estates to main roads, cul-de-sacs etc, are not shown on the map. This is due to the high number of these routes, which would make the map unreadable at the scale it is published here.

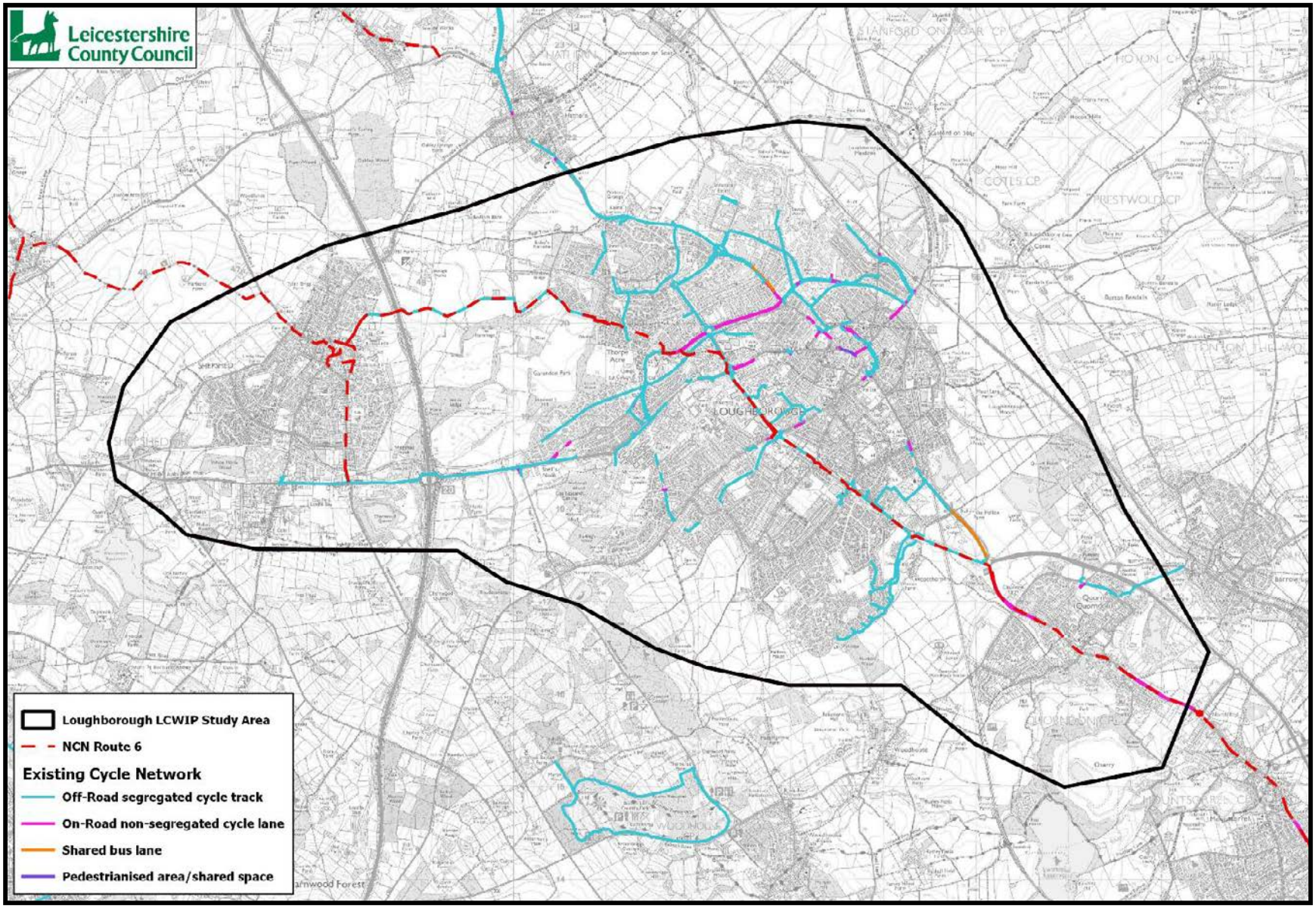


Figure 4.3 – Existing cycling network in the Loughborough LCWIP area

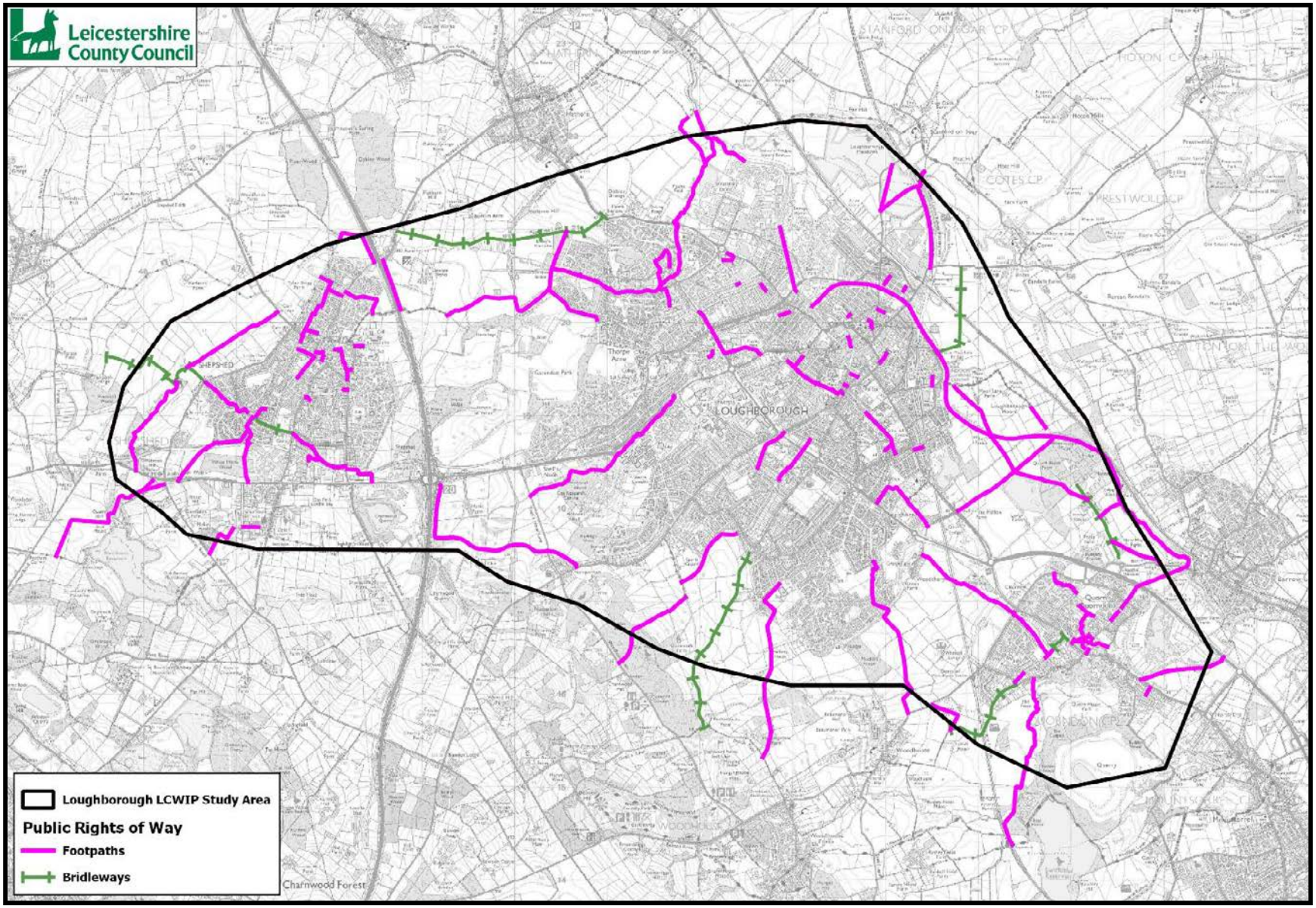


Figure 4.4 – Existing Public Rights of Way network in the Loughborough LCWIP area

4.2.1 Safety

Leicestershire County Council is a high performing authority when it comes to road safety and the number of collisions that occur compared with other county councils, East Midlands' authorities and statistical neighbours. Nevertheless, any injury is considered one too many. Improving safety for pedestrians and cyclists is a key priority for LCC, and the Government's Cycling and Walking Investment Strategy. As such it is an important objective of this LCWIP. An analysis was undertaken of collisions involving pedestrians and cyclists which occurred in the LCWIP area over a 5-year period from 2015-2019. Data was not analysed for collisions in 2020, due to the impacts of the COVID-19 pandemic on transport. Table 4.1 summarises the collision data for this period. Figure 4.5 shows the location of fatal, serious, and minor injury collisions.

Table 4.1 – Reported collisions involving pedestrians or cyclists in the Loughborough LCWIP area over 5-year period 2015-2019

	Pedestrians	Cyclists
Fatal	3	0
Serious injury	24	18
Minor injury	71	84
Total	**98**	**102**

Both pedestrian and cyclist collisions occurred over the whole of the LCWIP area. Many pedestrian collisions were clustered around Loughborough town centre, while cycling collisions were particularly located on the arterial routes into and out of Loughborough. The 3 fatal pedestrian collisions occurred on Holt Drive, Meadow Lane, and the A6004 Ling Road.

4.3 Using the analysis

The above analysis gave us the baseline position for cycling and walking in the LCWIP area, from which we can measure the potential for improvement. This is used as a starting point to develop ideas for what the future cycling and walking networks might look like, and to inform our engagement with stakeholders and the public, as set out in Chapter 5.

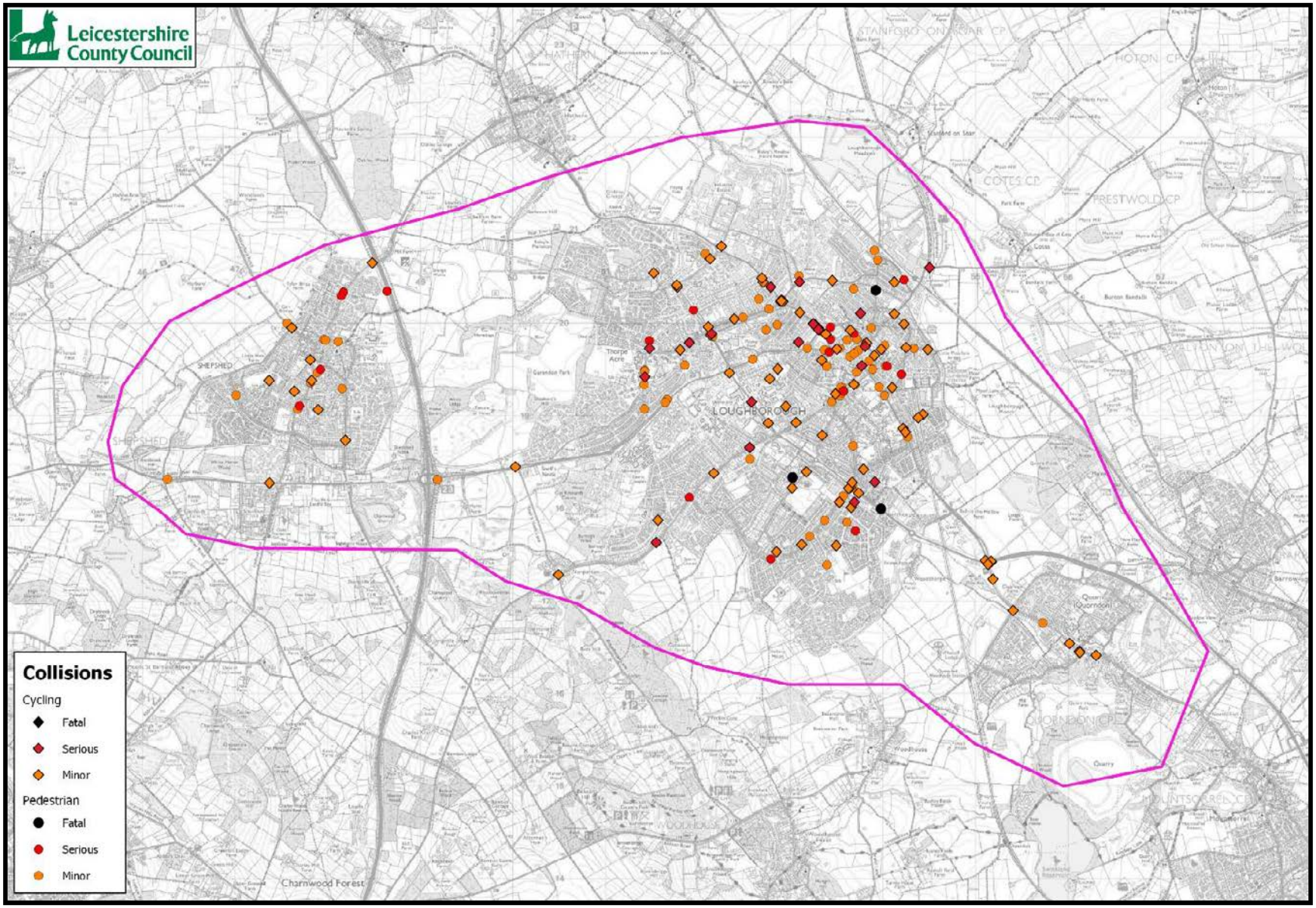


Figure 4.5 – Location of recorded cycling and pedestrian collisions in the Loughborough LCWIP area over 5-year period 2015 - 2019

5. Developing our LCWIP network plans

We recognise that the existing cycling, walking and wheeling networks do not maximise opportunities to increase active travel or meet the future needs of people living and travelling in the Loughborough LCWIP area. Developing up-to-date network plans in consultation with residents – the people who will, or could, benefit most from improved cycling and walking infrastructure – is a key part of the LCWIPs.

The methodology for developing the priority network plans was developed from the LCWIP technical guidance and follows several steps, as set out below.

5.1 Initial network plan development

5.1.1 Cycle network plan development

The LCWIP technical guidance sets out the following steps for developing the priority network plans for cycling:

1. **Identifying key origins and destinations.**
2. **Clustering of origins and destinations.**
3. **Identifying desire lines between origins and destinations (indicative, straight lines, rather than specific routes on the network).**
4. **Identifying routes serving the desire lines ("preferred routes").**
5. **Identifying a route hierarchy.**
6. **Producing draft network maps.**

5.1.1.1 Identifying key origins and destinations

Cycling trips usually start at home. We used Office of National Statistics (ONS) data to map population centres for Lower Layer Super Output Areas (LSOA) within the LCWIP study area. The ONS data only included developments up to 2011. Residential developments built since 2011 and committed future developments of 100 or more dwellings were mapped separately, to identify likely current and future origins for active travel.

We then identified the destinations that people want to travel to, based on the direction given in the LCWIP technical guidance document:

- healthcare facilities such as GP surgeries, health centres, and Loughborough General Hospital,
- pharmacies,
- large employment sites such as Loughborough University Science and Enterprise Park and the Bishop Meadow and Gelders Hall industrial estates,
- committed employment sites employing more than 50 people,
- key local plan growth areas,
- large supermarkets,
- primary education establishments,
- secondary and higher education establishments including the Loughborough University campus,
- Loughborough rail station,
- other transport interchanges, such as clusters of bus stops,
- libraries, and
- leisure sites such as sports stadiums, entertainment venues, visitor attractions such as Great Central Railway, leisure centres, and parks.

5.1.1.2 Clustering origins and destinations

The LCWIP technical guidance recommends that origins and destinations are clustered together where multiple sites are located within 400m of each other (a 5-minute walking distance and the recommended density for a joined-up urban cycling network), to simplify analysis of preferred routes.

The origins were already clustered together, due to our use of the ONS LSOA centroids. Destination clusters were defined using a Geographic Information System (GIS) to create a buffer around destinations within a 400m radius. These buffers were drawn to include as many destinations as possible, without including sites separated by a significant barrier (e.g. a major road or railway line) or creating any overlap across clusters.

Unsurprisingly, many of the key destination clusters are in Loughborough and Shepshed town centres.

The destination clusters were then weighted to provide an assessment of their desirability. Weightings ranged from 1-5 and were based on the number and type of destinations present and the number of cyclists the destination is likely to attract. The highest weighting was given to employment sites, transport interchanges, and secondary schools, in support of the CaWS targets to increase cycling and walking/wheeling to places of employment and education.

5.1.1.3 Identifying desire lines for cycling

'Desire lines' represent existing and potential demand for travel between origins and destinations. They are indicative, straight lines, rather than following specific routes on the network.

Desire lines were mapped between every origin and destination. We then assigned cycling demand to origin clusters based on the number of commuting trips from that LSOA according to the 2011 Census. This demand was combined with the destination cluster weightings, to give overall desirability scores.

Figure 5.1, below, shows the top 25% desire lines for each settlement in the Loughborough LCWIP area.
The thicker, darker lines are likely to be more desirable to cyclists. Thinner, lighter lines are less likely to be desirable.

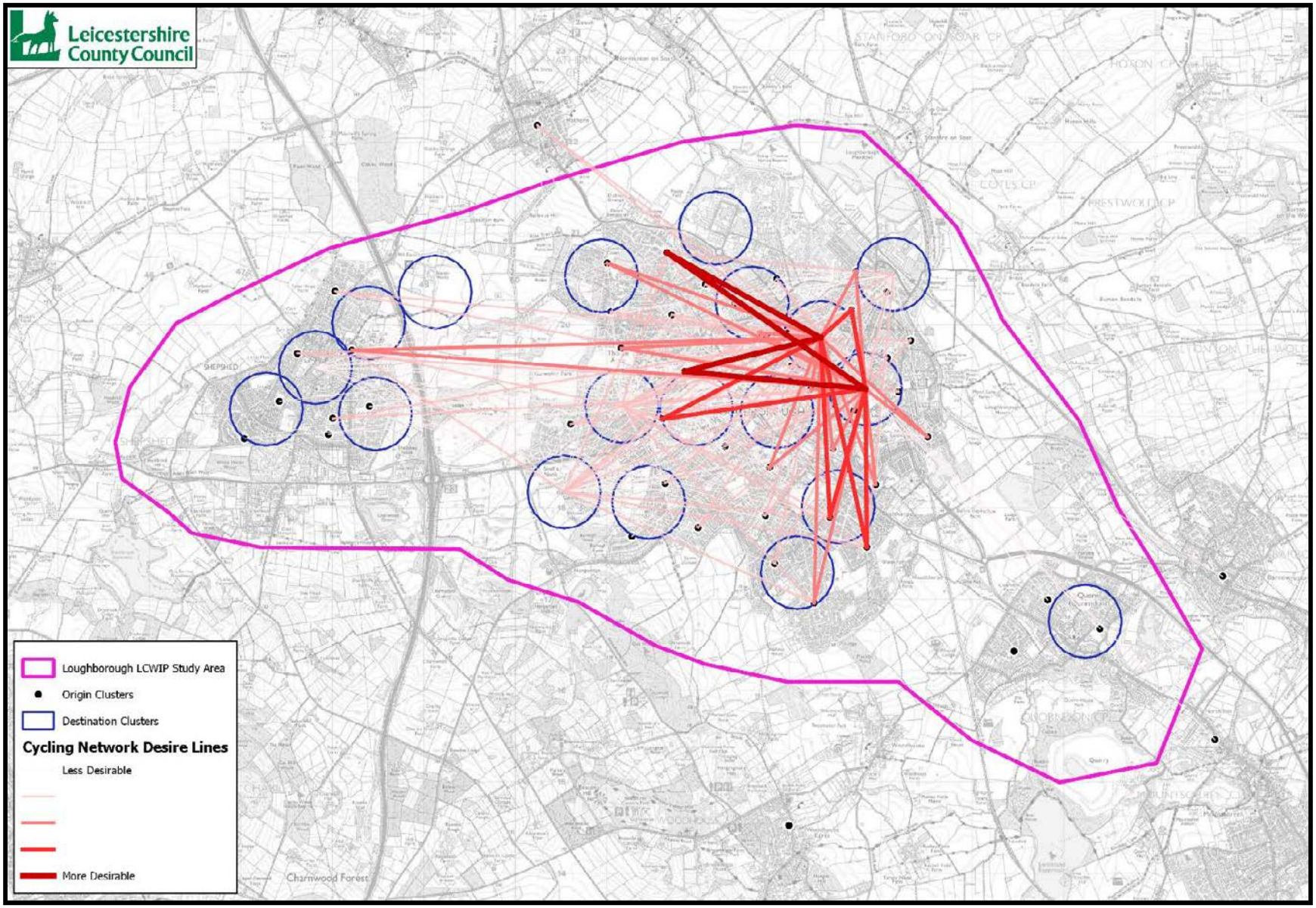


Figure 5.1 – Cycling desire lines for settlements in the Loughborough LCWIP Area

5.1.1.4 Identifying preferred routes

These desire lines indicate where people are most likely to cycle to/from in the study area, but they don't show us what routes people will use to get between these places. In most cases, there are many routes which people can take to get between the various origins and destinations. Google Maps, Strava Metro, and BetterPoints data was used to help identify which routes people are likely to prefer.

Google Maps

Google Maps' journey planning function was used as a starting point for narrowing down the possible routes, by identifying which routes are quickest and tend to have the best travel conditions.

Strava Metro (Strava)

Strava is a social networking app, which allows people to track activities such as walking, cycling, and running. The app records data such as distance travelled, how long the user spent doing the activity, and the route taken. This data is made available in an anonymised form to local authorities to help identify investment opportunities.

Not everyone uses Strava, or records all of their activities on the app. For example, some people may only use the app to record leisure activities such as jogging, rather than journeys to the shops or their place of work or education. However, the company estimates that 17% of the UK population have downloaded and registered an account on the app.[10] Therefore, the data set is considered to offer valuable insight into how and where people travel actively.

Strava data was used to identify which routes people currently use or avoid when travelling between origins and destinations in the LCWIP area.

BetterPoints

The BetterPoints app is available to people who live in, or commute into, Leicester and Leicestershire. It tracks users' journeys, and rewards active travel such as walking, wheeling, and cycling with points which can be redeemed for high street vouchers or donated to charity. Data is shared with the County Council and Leicester City Council, to provide data on where people are travelling by walking and cycling in Leicestershire.

The BetterPoints app is less well-known and used by fewer people than Strava. As it is incentivised, there is also a risk that its user base may be more weighted to lower-income users such as students and less representative of the population as a whole. This means that it is not a reliable data source in isolation. However, the app is specific to Leicestershire and focuses on encouraging people to switch from car journeys to active modes, which is a key aim of the LCWIPs. Therefore, the data was used to complement Strava data to identify the routes that people prefer to use to get from A to B.

The routes identified through this process were prioritised, before being developed into an initial draft cycling and walking network.

[10] Year in Sport report, Strava, 2021.

5.1.1.5 Identifying a route hierarchy

The Government's LCWIP technical guidance sets out criteria for prioritising the routes which make up the cycling and walking networks in LCWIPs. Cycling routes are split into three categories as set out below:

1. Primary: High flows of cyclists are forecast along desire lines that link large residential areas to trip attractors, such as a town or city centre.

2. Secondary: Medium flows of cyclists are forecast along desire lines that link to trip attractors, such as schools, colleges, and employment sites.

3. Local: Lower flows of cyclists are forecast along desire lines that cater for local cycle trips, often providing links to primary or secondary desire lines.

We identified and categorised the routes according to the LCWIP technical guidance. Cycling routes which will serve future developments are identified separately as indicative routes, due to the fact that many of these developments still need to go through the planning process:

- **Future Primary** (Indicative),
- **Future Secondary** (Indicative), and
- **Future Local** (Indicative).

5.1.1.6 Producing the draft network map

Once all of the above steps were complete, the current and indicative Primary, Secondary, and Local cycling routes in this LCWIP area were brought together into a draft priority network map.

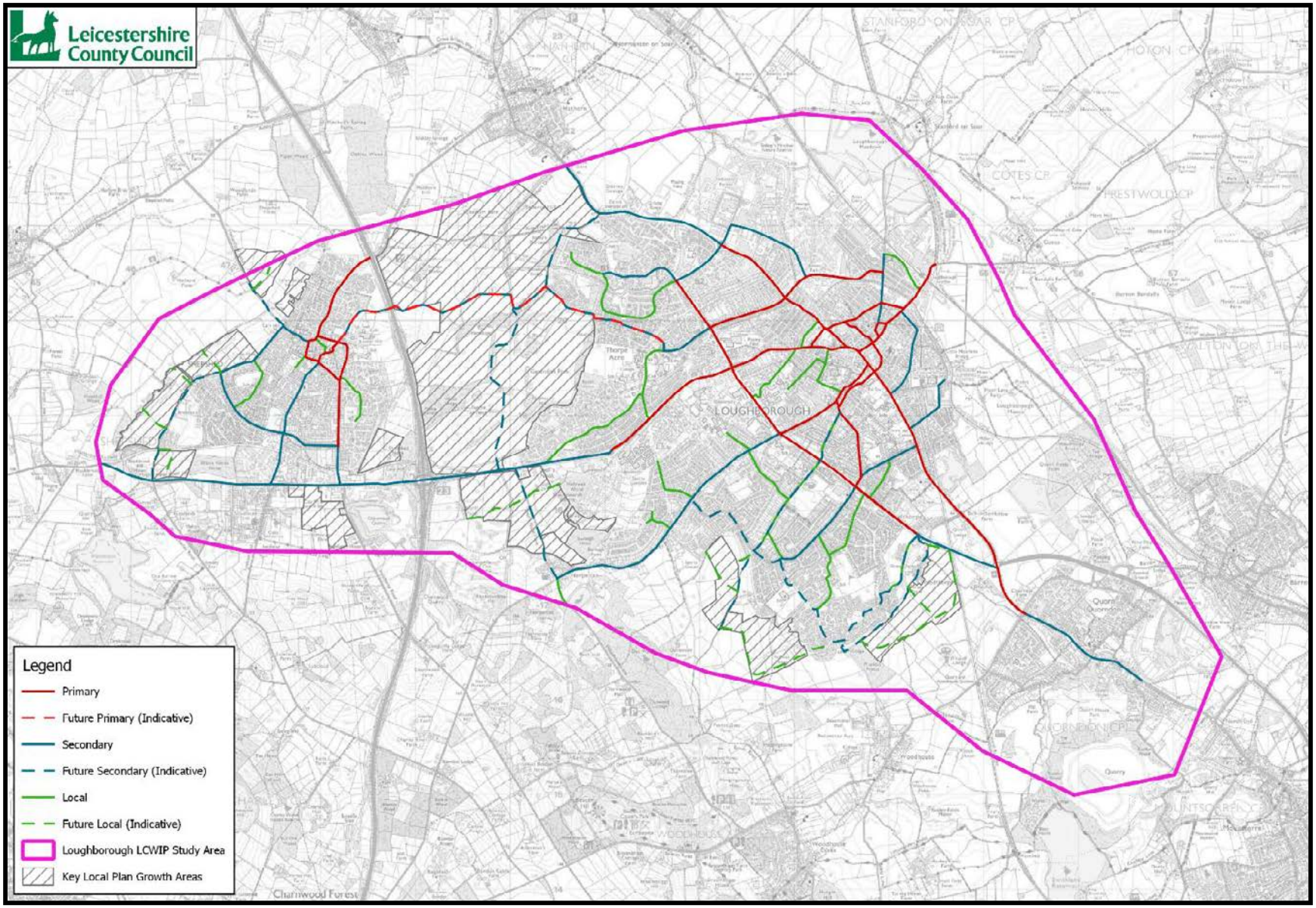


Figure 5.2 – Map of the draft Loughborough LCWIP priority cycling network

5.1.2 Walking and wheeling

The LCWIP technical guidance methodology for creating priority network maps for walking and wheeling differs from the methodology for cycling, and contains the following steps:

1. **Mapping walking trip generators.**
2. **Identifying core walking zones.**
3. **Identifying key walking routes.**
4. **Identifying a route hierarchy.**
5. **Producing a draft walking network map.**

The actions and technical work which we undertook in following this methodology are set out below.

5.1.2.1 Mapping walking trip generators

Trip generators for walking and wheeling are generally the same as those for cycling, although people are likely to travel further on a bicycle. Therefore, we used the key destinations identified for cycling to determine the walking trip generators.

As the Loughborough LCWIP covers a large area, we only included the most significant trip generators for walking. These are where several destinations are located close together. This gave us the following:

- **Loughborough Town Centre**
- **Shepshed Town Centre**
- **Loughborough Railway Station**
- **Loughborough University**
- **LU Science and Enterprise Park**
- **Bishop Meadow Industrial Estate**
- **Cluster of Schools**
    - Thorpe Acre School
    - Booth Wood School
    - De Lisle College
    - Charnwood College

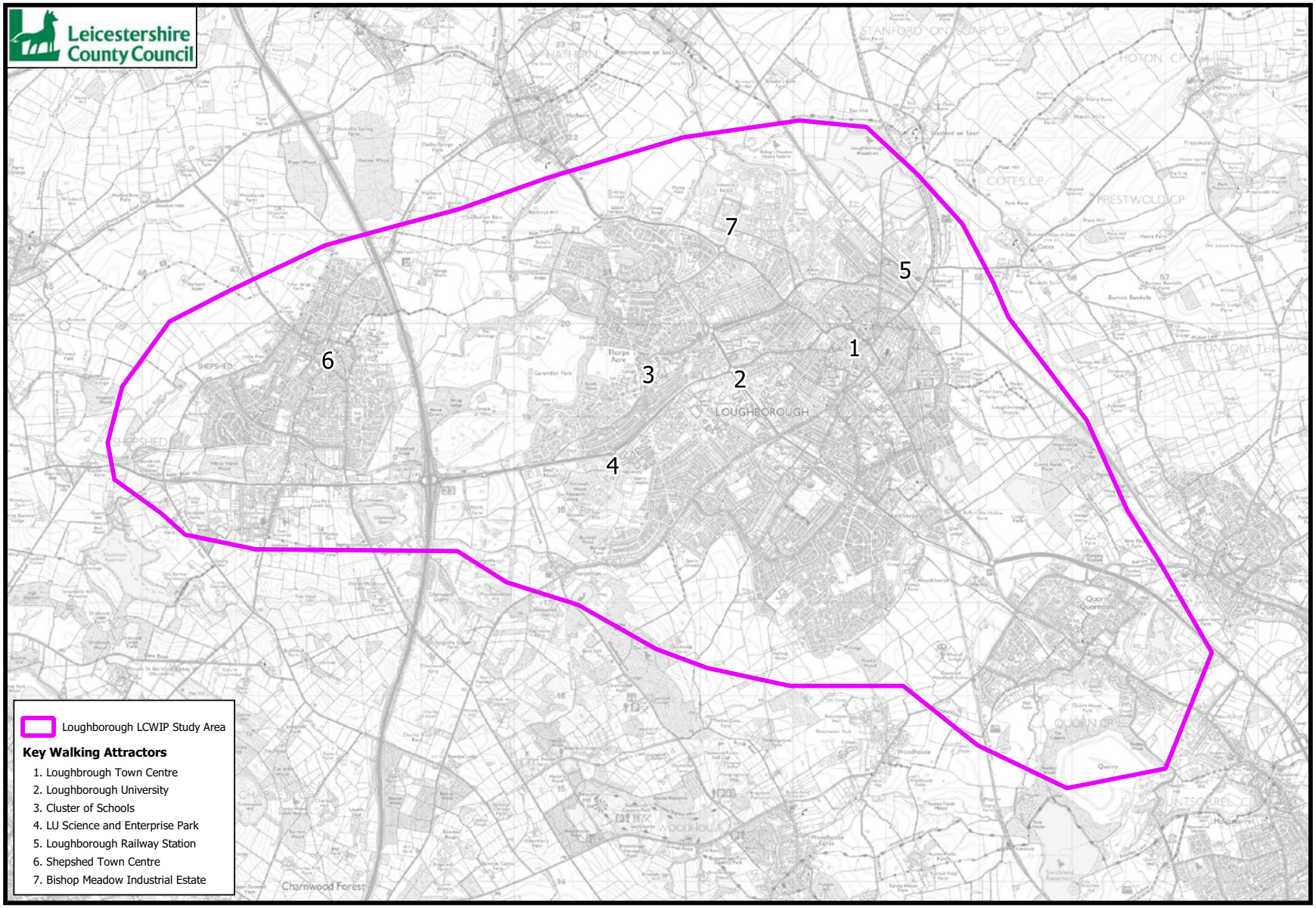


Figure 5.3 – Key walking attractors

5.1.2.2 Identifying core walking zones

Core walking zones consist of several key trip generators which are close together and where there is the potential for a high number of walking and wheeling journeys.

A distance of 400m (representative of approximately 5-minutes of walking) between core walking zones and key trip generators is recommended in the LCWIP technical guidance, whilst 2km is generally accepted as the maximum distance at which people are likely to consider walking and wheeling to be a viable mode for their journeys.

Therefore, we identified core walking zones which are within 400m of the key trip generators, as mapped via the shortest road network route in GIS. We then applied 2km buffers to help to identify the key routes serving the core walking zones. This resulted in a map of core walking zones as shown in Figure 5.4, below.

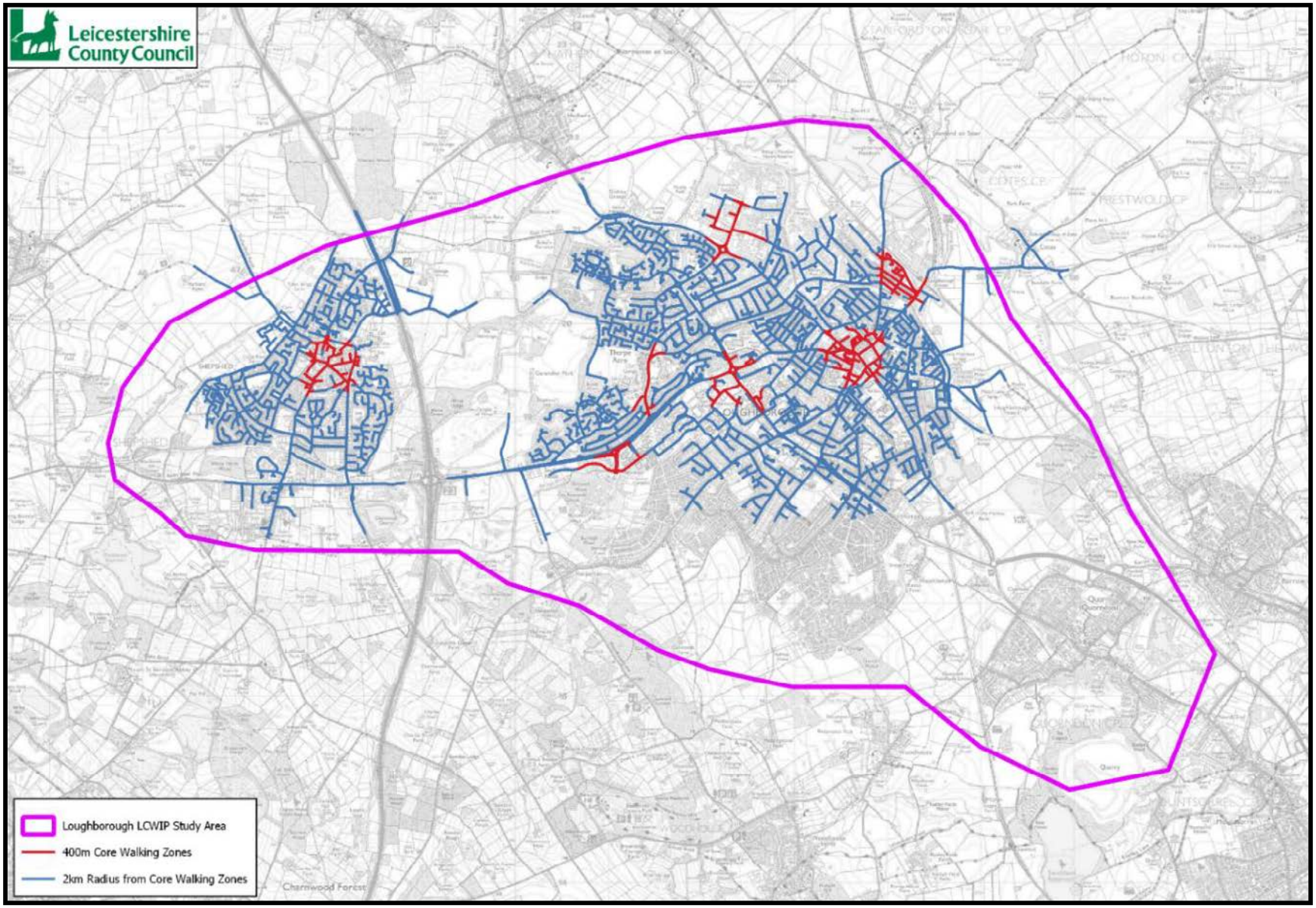


Figure 5.4 – Core walking zones in the Loughborough LCWIP area

5.1.2.3 Identifying key walking and wheeling routes

In many cases, there is more than one route which can be used to walk or wheel between an origin and a destination. We used Google Maps, Strava Metro, and BetterPoints, as set out in 5.1.1.4, to help us identify the key walking and wheeling routes within the 400m and 2km zones.

5.1.2.4 Identifying a route hierarchy

The LCWIP technical guidance advises that key walking and wheeling routes should be defined according to the Footway Maintenance Classification as set out in the Code of Practice for Highway Maintenance Management.[11]

There is a greater range of categories for walking routes, reflecting the fact that they are significantly larger in number and often more diverse than the cycling network:

1(a). Prestige walking zones: Very busy areas of towns and cities, with high public space and street scene contribution.

1. Primary walking routes: Busy urban shopping and business areas, and main pedestrian routes.

2. Secondary walking routes: Medium-usage routes through local areas feeding into primary routes, local shopping centres etc.

3. Link footways: Linking local access footways through urban areas and busy rural footways.

4. Local access footways: Footways associated with low usage, short estate roads to the main roads, and cul-de-sacs.

As with the cycling routes, a series of indicative routes which are likely to serve significant future developments have also been identified. This have been given the categories of:

1. **Future Primary (Indicative).**
2. **Future Secondary (Indicative).**
3. **Future Links (Indicative).**

5.1.2.5 Produce a draft walking and wheeling network map

Following completion of the analysis and ranking of routes, a draft walking and wheeling network map was produced. Local access footways were not included in the map, as the density of the network would have made it illegible.

[11] Well-maintained Highways: Code of Practice for Highway Maintenance Management, Roads Liaison Group (2005, updated September 2013).

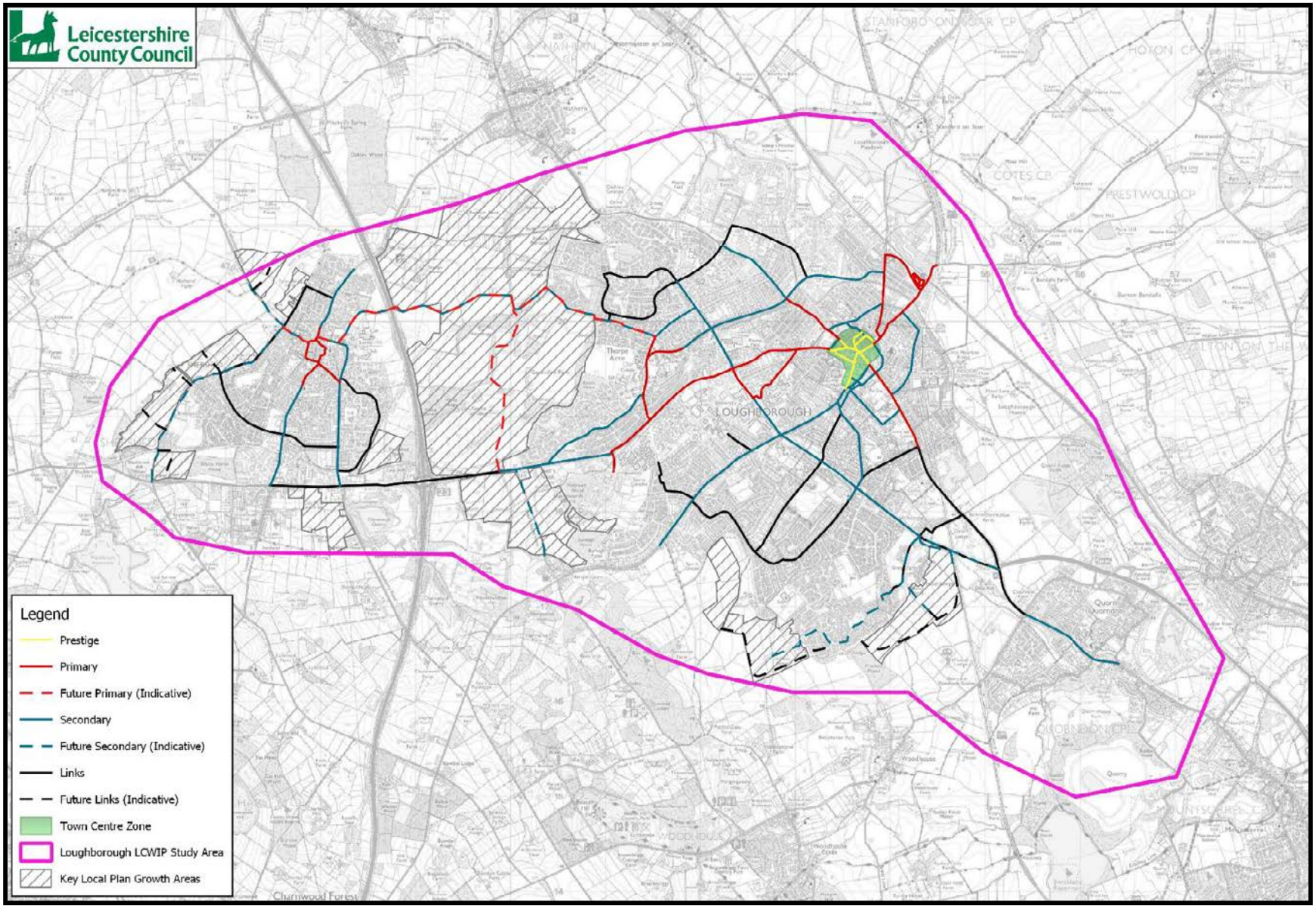


Figure 5.5 – Map of the draft walking and wheeling priority network in the Loughborough LCWIP area

5.2 Public engagement

5.2.1 Stakeholder engagement

Charnwood Borough Council was invited to an engagement workshop, where we explained the concept and purpose of the LCWIPs. The aim of this workshop was for us to understand their plans and aspirations for travel in the Loughborough LCWIP area and to provide an opportunity for them to give us their comments on the initial cycling and walking network maps.

The network maps were refined following this engagement. This included adding new routes and amending existing routes where appropriate. Where we considered that it would not be appropriate to include routes which the Borough Council had suggested, for example because the routes serve smaller destinations, these were not included.

The revised cycling and walking and wheeling maps were combined into one plan and published as part of a map-based public consultation exercise (see 5.2.2.2, below).

In tandem with the public consultation exercise, we asked the elected members and councillors for the LCWIP area to provide us with their top 5 priorities for walking and cycling in their wards. We also sought comments from special interest groups who have expert knowledge and experience of the needs of walkers, cyclists, equestrians etc. These included the British Horse Society and the Canals and Rivers Trust.

5.2.2 Engagement with the general public

5.2.2.1 Widen My Path

As part of the management of the COVID-19 pandemic, Government announced that local highway authorities (LHAs) should improve streets and cycleways to support physical distancing. To support this, and assist LHAs in prioritising immediate locations for improvement, Cycle Streets created the Widen My Path online tool, which members of the public could use to tell LHAs what improvements they would like to see, and where.

Improvement types were categorised as:

- **width** – where the width of the path should be increased,
- **condition** – where the condition of the path needs to be improved (e.g., resurfacing),
- **parked cars** – where parked cars make a path difficult or dangerous to use,
- **new footway / cycle path** – where a new footway or cycle path is needed,
- **time restriction** – where an existing time restriction should be extended for cyclists,
- **multiple** – where more than one of the above has been selected, and
- **other** – things which were only mentioned once or didn't fit into the above categories (e.g., toucan crossing timings, difficulty finding the entrance to cycle paths).

We used this information to guide our perception of the types of improvements which people prefer, and the locations which members of the public view as priorities.

5.2.2.2 Map-based engagement

A public, map-based, forum exercise was undertaken as part of early engagement for the LCWIP area, helping to shape the cycling, walking and wheeling networks and inform what infrastructure should be provided on the network to encourage and enable the community to travel actively.

During this early engagement activity, we invited feedback on:

- the draft key cycling, walking and wheeling network, e.g., were there key routes missing that lots of people currently use, or could use if improved, or did they feel a change to a route was needed,
- comments on types of infrastructure improvements they would like to see on the cycling and walking network – e.g., dedicated cycle lanes, junction improvements, shelters, benches etc, and
- other feedback they thought would be of value in developing the LCWIP for this area.

There were over 1,000 visits to the engagement portal with 222 comments relating to the Loughborough LCWIP area. These comments included lots of useful feedback on the draft networks, and the infrastructure people would like to see in these areas, as well as feedback on the general approach to LCWIPs.

Respondents were also able to 'like' and reply to posts to show their support for, or discuss the comments and suggestions raised by, other users. The number of comments given above includes those posted as replies.

Respondents using the forum were able to ask questions and seek clarification from the engagement team, which was posted publicly to help other users. People who had difficulty using the forum were sent electronic and/or paper copies of the maps and forum questions and given the opportunity to provide comments by letter or email.

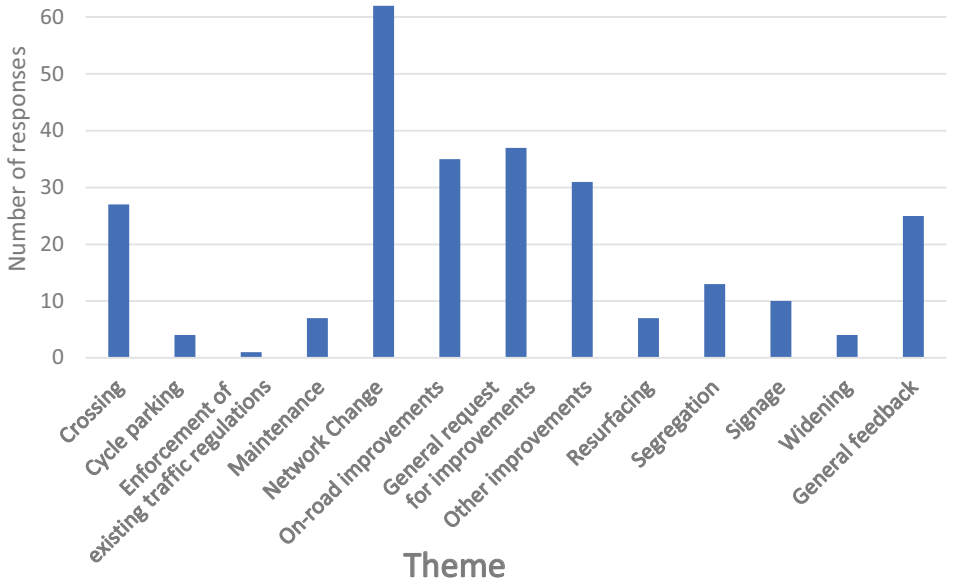
5.2.2.2.1 Analysing the feedback

Once the consultation closed, the feedback was anonymised and analysed to identify which routes received the most comments, and the improvements and issues which residents told us they think are important. Comments which were left in reply to other users were analysed in the same way as other posts.

We identified the primary 'themes' of the comments, including those posted as replies, depending on what issue the respondent had raised or what type of improvement they had requested. Multiple themes were assigned to comments where respondents raised more than one issue and/or improvement. We did this by reading the comments thoroughly and identifying the key points from the comments, rather than categorising the comments into a pre-existing list of themes. This ensured that the themes accurately reflected the issues and improvements which were raised.

The infographic below shows the proportion of comments received for each theme for the Loughborough LCWIP area. (It should be noted that some comments requested more than one type of intervention, so the total number of comments by theme may exceed the total number of individual responses).

Figure 5.6 - Confers responses by theme as a proportion of overall responses



5.3 Network plan refinement

Following analysis of the key stakeholder and public engagement feedback, the network plan was revised further. Our decision to include new routes or extend existing routes as proposed by members of the public was informed by the following criteria:

- the sizes of the origins and destinations which would be connected by the proposed route,
- the overall density of the network,
- the deliverability of improvements on the proposed route, and
- the potential for cycling, walking, wheeling, and horse riding on the proposed route, in comparison to alternative routes already in the cycling, walking and wheeling networks.

5.4 The Loughborough LCWIP network maps

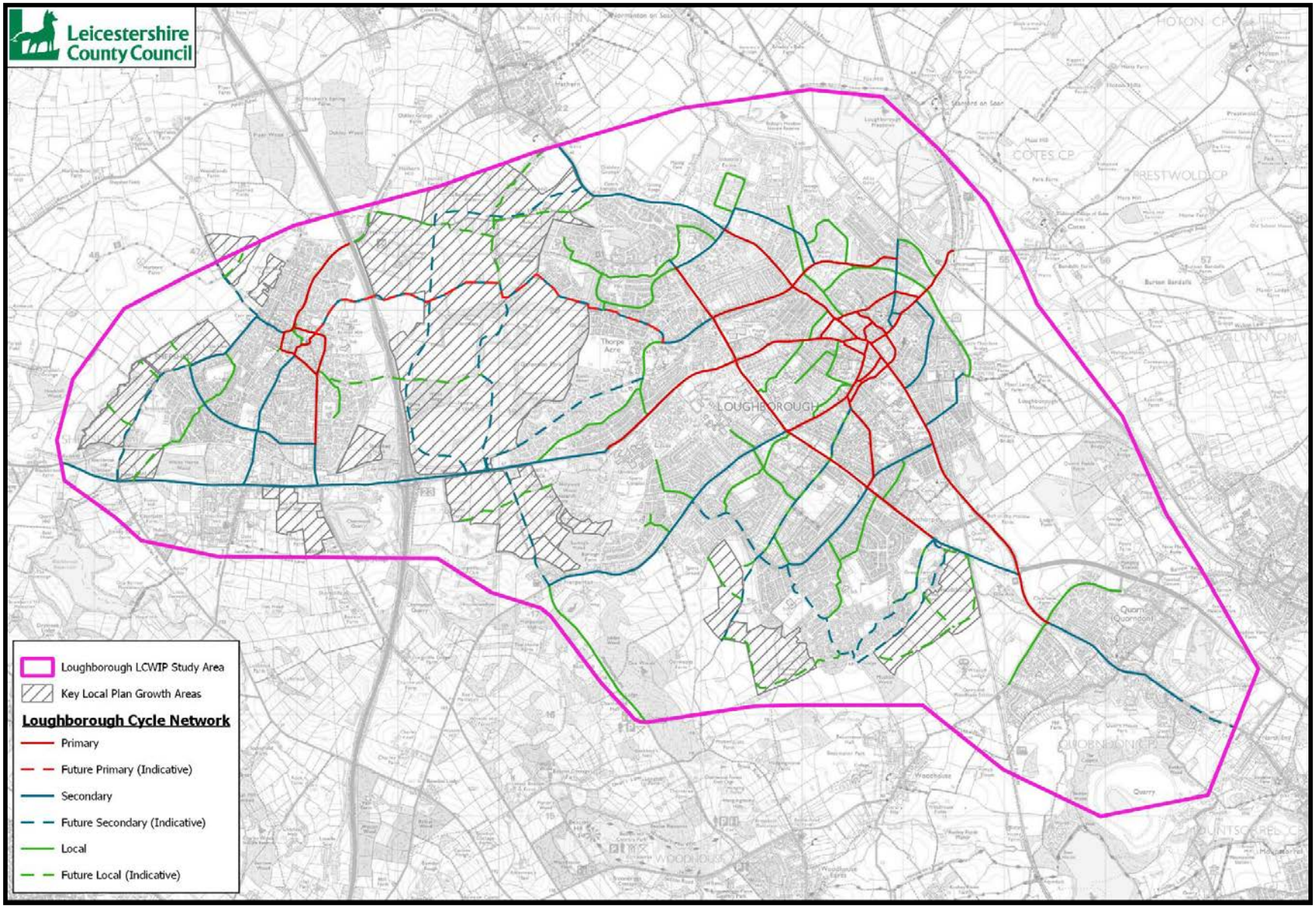


Figure 5.7 – Final Loughborough LCWIP area cycling priority network map

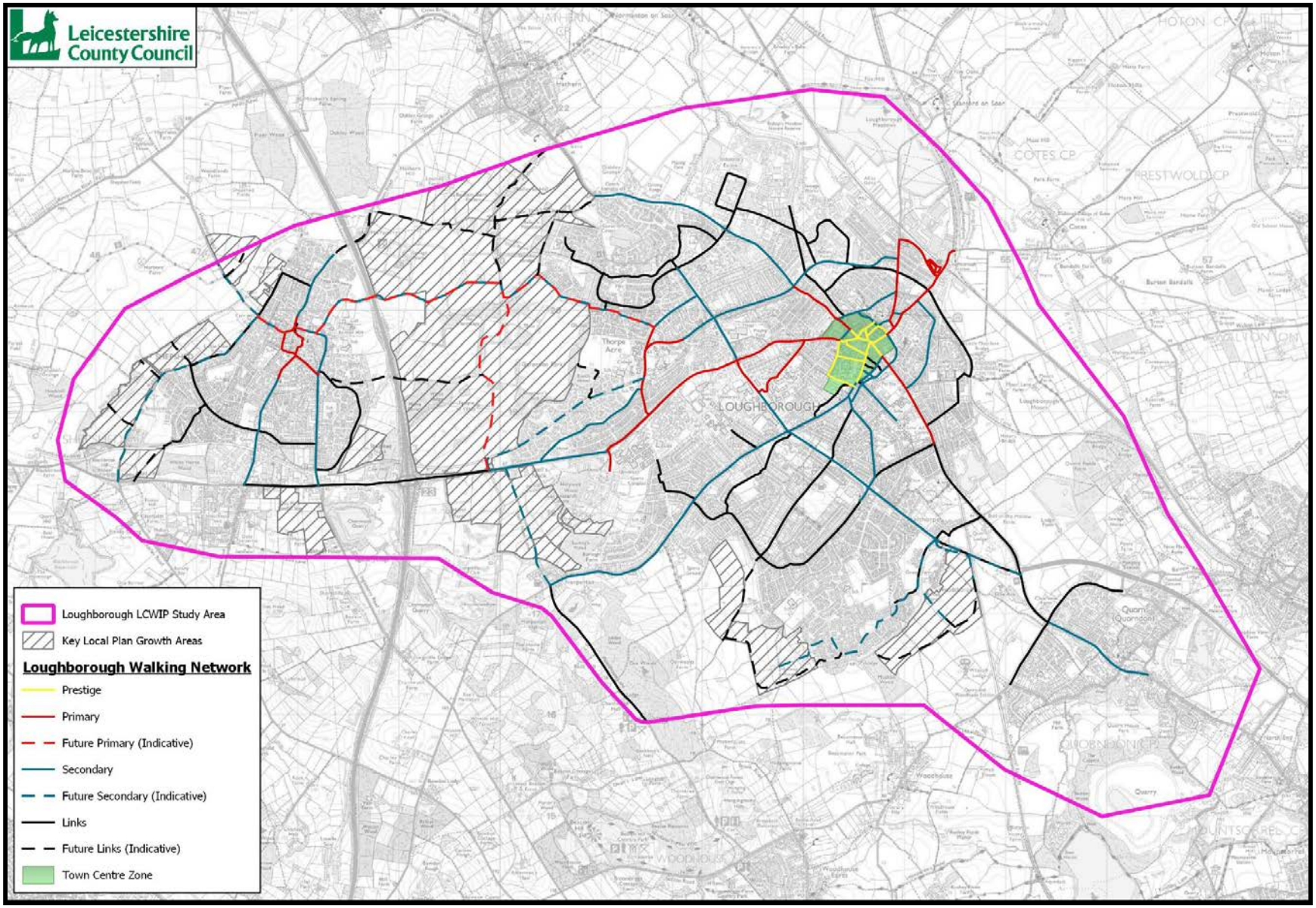


Figure 5.8 – Final Loughborough area walking and wheeling priority network map

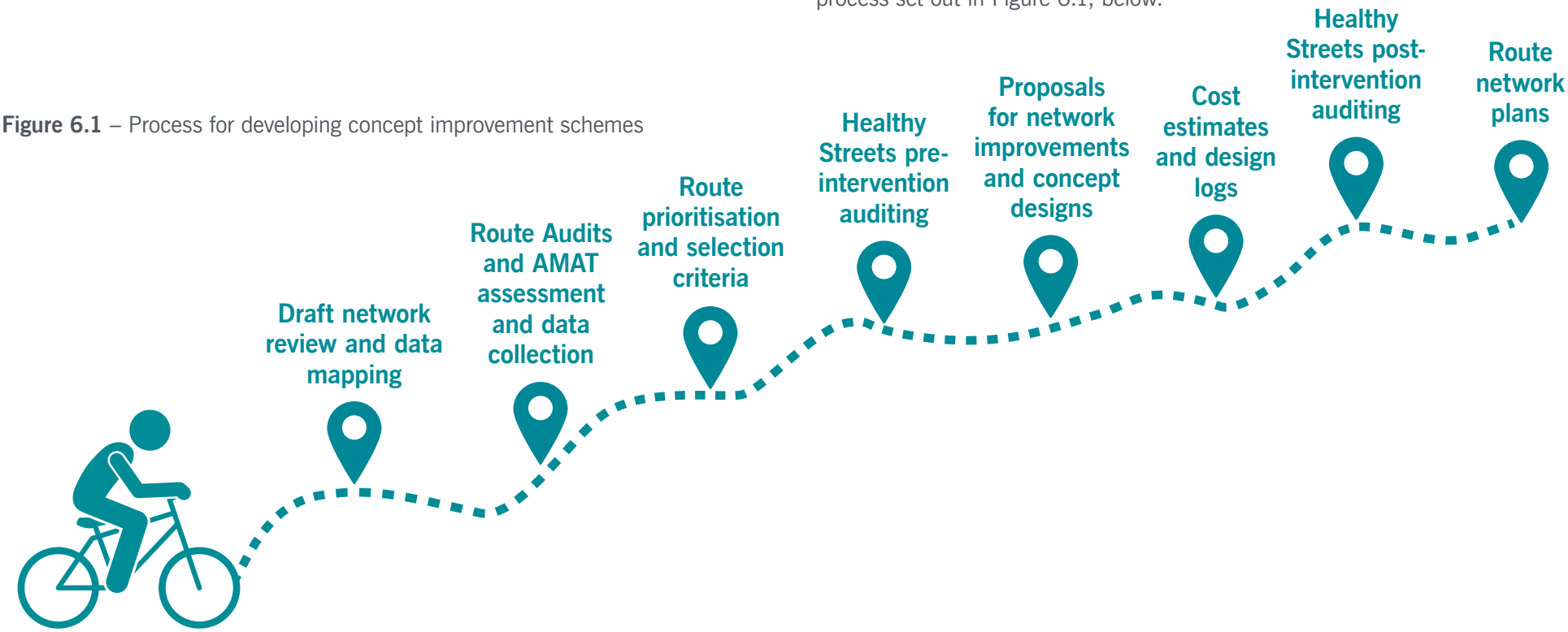
6. The future of cycling, walking and wheeling in the Loughborough LCWIP area

Once the maps for the LCWIP priority cycling, walking and wheeling networks had been finalised, the next step of the process was to:

- analyse the needs and concerns on each route, and
- develop the long list of schemes that will make up our initial 10-year pipeline of improvement schemes.

As part of our commitment to encouraging and enabling our communities to travel actively and realising our aspirations, we have also gone a step further than many local authorities when drafting our LCWIPs, by undertaking a significant programme of auditing and concept design work. This has enabled us to explore some concept ideas for potential improvement schemes, developing a short list of routes with concept design drawings. To do this, we followed the process set out in Figure 6.1, below.

Figure 6.1 – Process for developing concept improvement schemes



These steps were combined into four work phases:

1. **Network review:** a review of the existing policy documents and best practice relating to designing inclusive cycling and walking/wheeling schemes; followed by a review of the network to identify the preliminary areas of interest.
2. **Route auditing:** preliminary audits, carried out using Google Maps and site visits on bike and on foot, and a review of the routes against the Healthy Streets criteria.
3. **Concept designs:** development of concept scheme designs and final scheme maps.
4. **Post-intervention audits:** the route audits against Healthy Streets criteria were repeated to assess the level of improvement which the schemes will provide.

6.1 Network review

All of the routes identified that make up the priority LCWIP networks for improvement are those which are considered to greatest potential to benefit local communities, encouraging and facilitating active travel to be a part of daily life. As defined in Government guidance, LCWIPs set out an initial 10-year pipeline of improvement schemes which are to be prioritised first, representing part of the entire network to ultimately be improved.

The priority network maps were reviewed against traffic speed and volume data, road collision data, local growth sites, the key origins and destinations set out in chapter 5, and public engagement data, including information from Widen My Path and the results of the public consultation and engagement on the draft network maps.

As Prestige, Primary, and Secondary routes are expected to be used by the most people to access the greatest number of key origins and destinations, these routes were prioritised for the first 10-year pipeline of potential improvement schemes. The routes were reviewed to ensure that focusing interventions on the Primary and Secondary routes would not impact negatively on the overall coherence of the cycling and walking networks.

Figures 6.2 and 6.3 show the 'hot spots' which were identified for further investigation. These are where clusters of points of interest are most prevalent, including:

- serious pedestrian and cyclist collisions,
- Widen My Path and public consultation areas of interest,
- essential services such as education and employment sites, and
- future growth sites as identified in local plans.

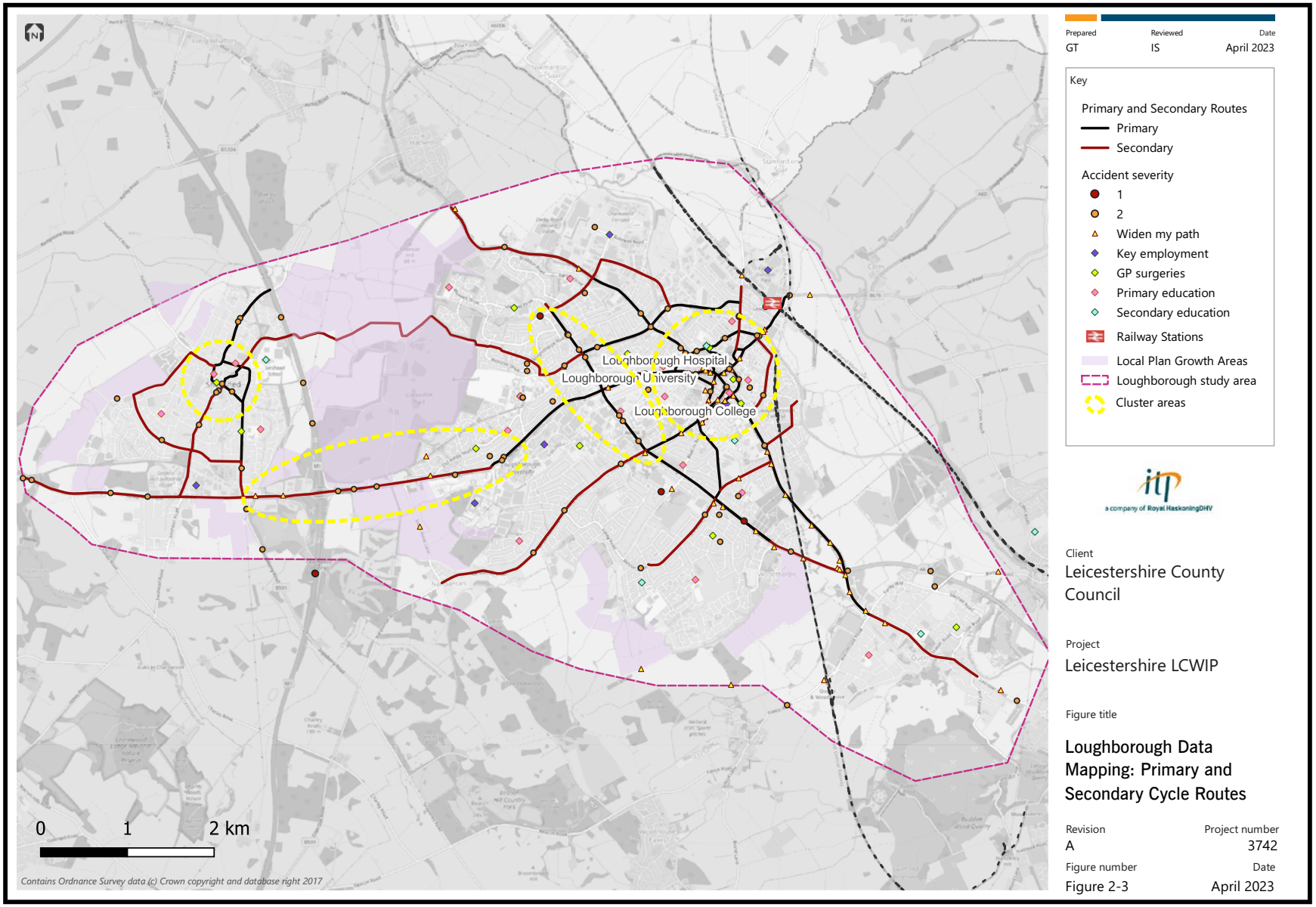


Figure 6.2 – Cycling network hotspots for further investigation

As shown in the maps, there are four key clusters in the Loughborough LCWIP area. These are mainly located around Loughborough town centre and Shepshed, with additional areas of connectivity around Loughborough University and Loughborough Hospital.

The prestige walking and wheeling routes are typically links over shorter distances, connecting key points of interest in Loughborough town centre, including Loughborough town hall and leisure and shopping destinations.

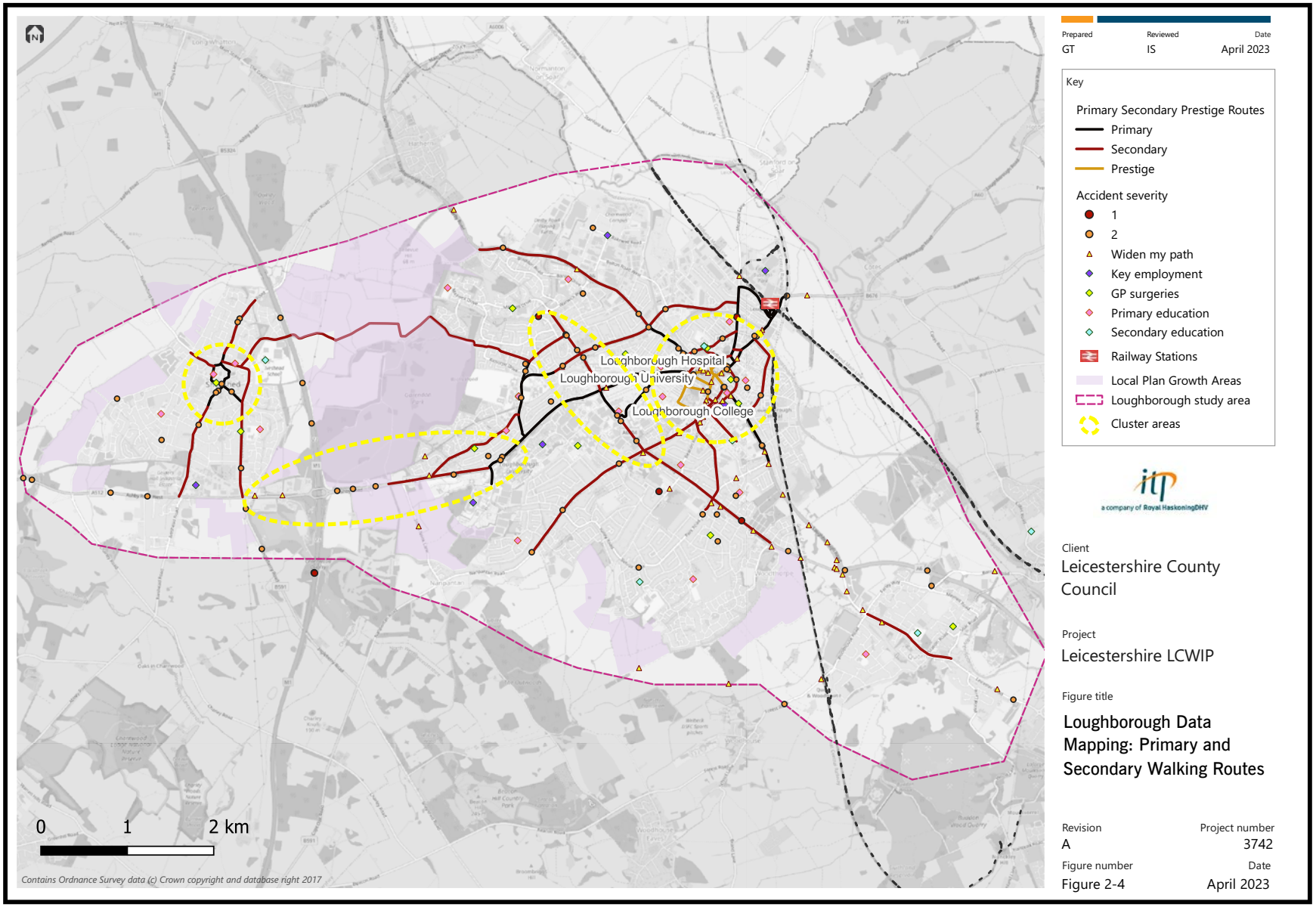


Figure 6.3 – Walking and wheeling network hotspots for further investigation

The parts of the LCWIP network which were highlighted by the hotspots were taken forward for detailed route auditing.

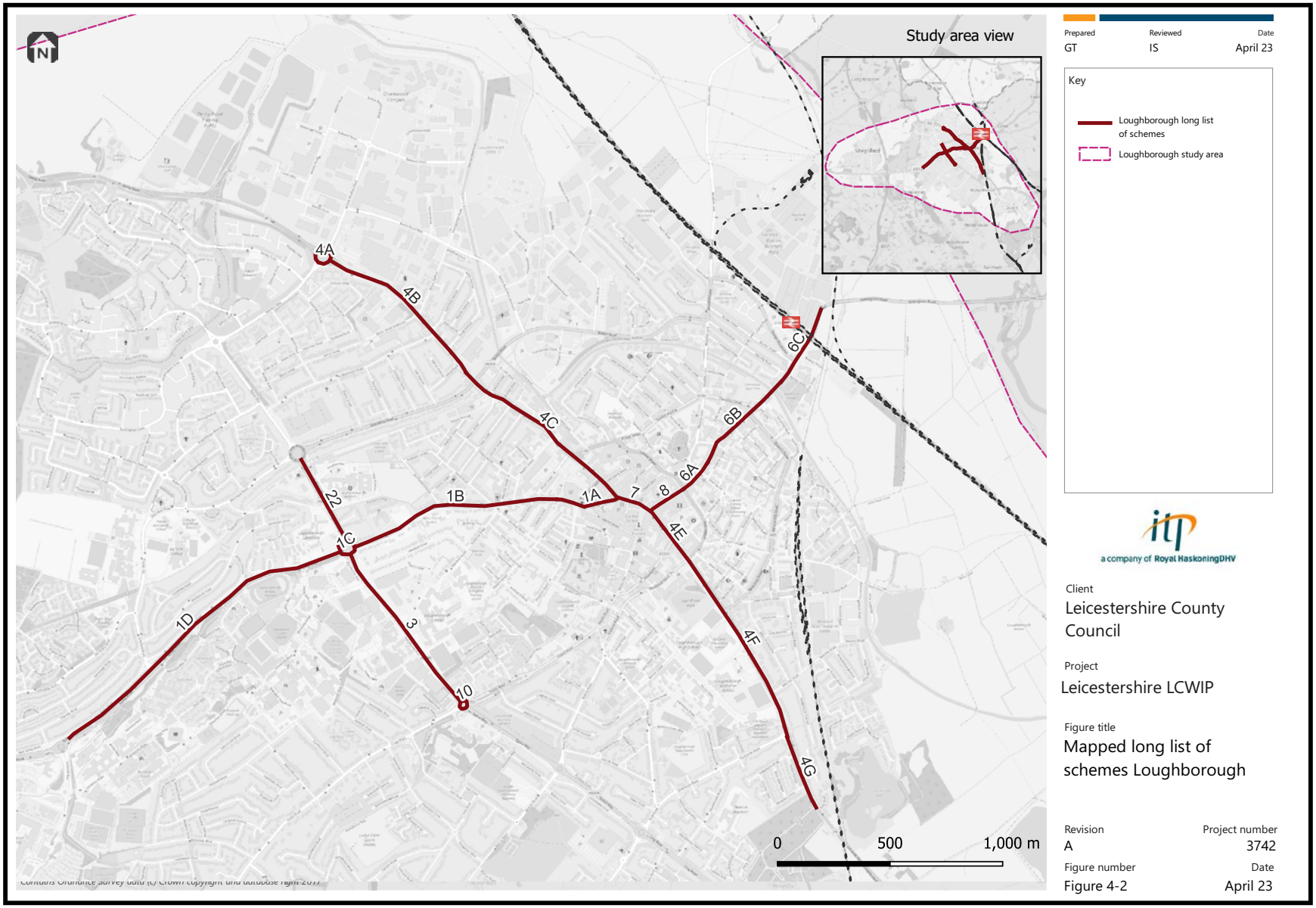


Figure 6.4 – Map of the routes to be taken forward for detailed route auditing

6.2 Detailed route auditing

The auditing of routes is a key part of the process, helping us to understand the current condition of existing routes and facilities and informing what improvements are needed to improve a route for active travel.

The routes were initially audited using a desk-based process, with selected routes receiving follow-up site visit audits. Proformas were completed to appraise the existing conditions on the cycling and walking routes and provide a baseline, against which to assess future improvements.

Once the outputs of these audits were known, a select number of appropriate routes were audited using the Healthy Streets Design Check toolkit (see 6.2.5, below).

6.2.1 Development of audit criteria and proformas for desk-based audits and site visits

Bespoke audit proformas were created for use during the desk-based audits and site visits. Separate proformas were created for walking and cycling, to take account of the differing needs of cyclists and pedestrians.

The audit criteria were selected based on the results of the literature review and industry standard tools:

- Propensity to Cycle Tool,[12]
- Route Selection Tool,[13]
- Walking Route Audit Tool,[14]
- Cycling Level of Service,[15] and
- Junction Assessment Tool.[16]

[12] Active Travel: local authority toolkit, Department for Transport, August 2022.

[13] Active Travel: local authority toolkit, Department for Transport, August 2022.

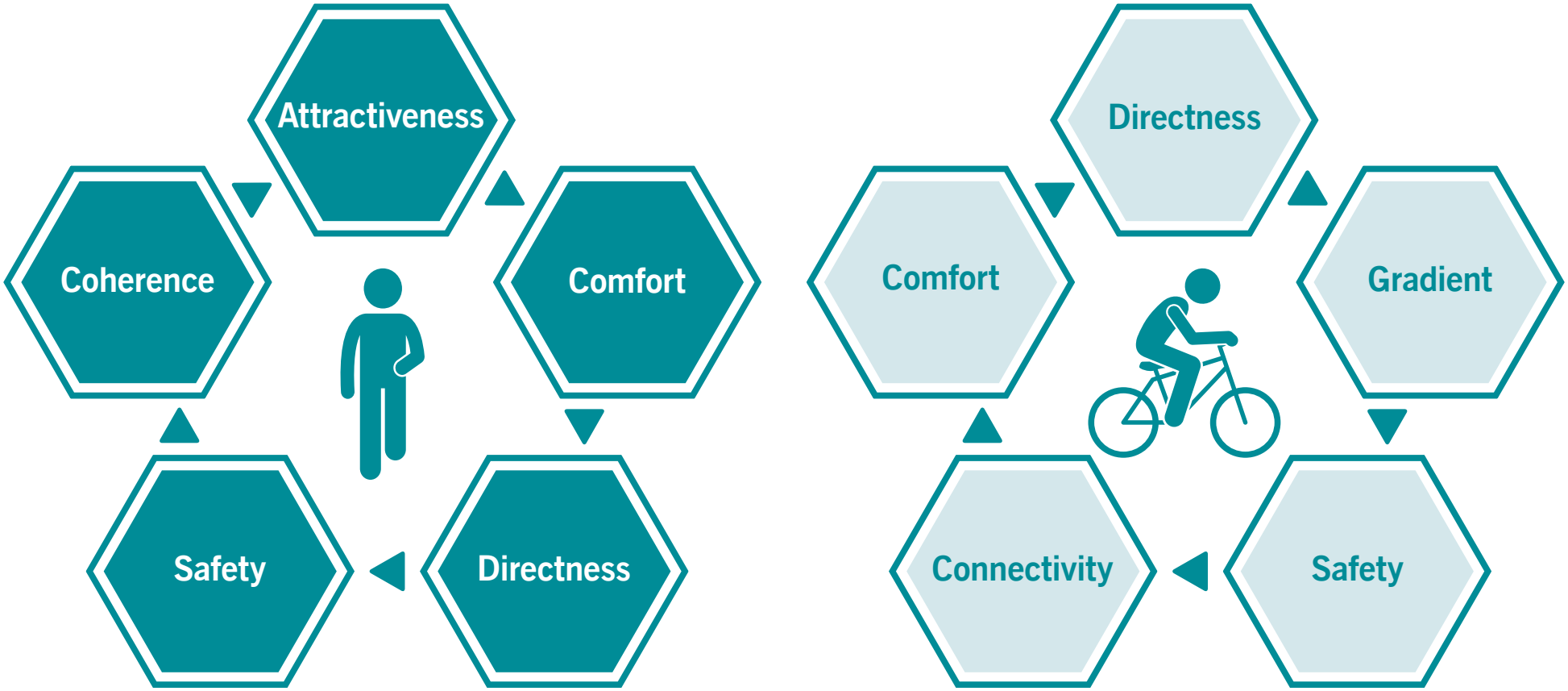
[14] Planning local cycling and walking networks: Technical guidance and tools, Department for Transport, April 2017.

[15] Cycle infrastructure design (LTN 1/20) (Appendix A), Department for Transport, July 2020.

[16] Cycle infrastructure design (LTN 1/20) (Appendix B), Department for Transport, July 2020.

The proformas also considered how well the routes meet core design outcomes as set out in the Route Selection Tool for cycling and Walking Route Audit Tool for walking and wheeling. These principles are set out in figure 6.5, below.

Figure 6.5 – Walking and cycling core design principles from the Route Selection Tool and Walking Route Audit Tool[17]



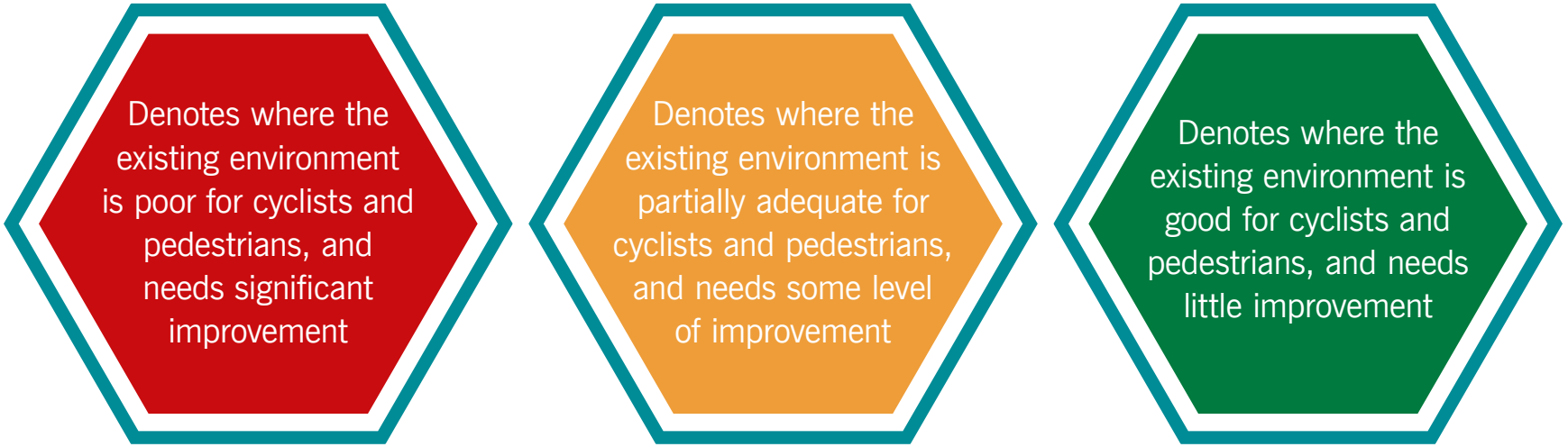
[17] Planning local cycling walking networks: Technical guidance and tools, Department for Transport, April 2017.

Finally, the proformas and audit criteria considered the core design principles as noted in the LCWIP technical guidance (see appendix A).

Bringing all of these sources together resulted in identification of 24 criteria as shown in figure 6.6, and an audit proforma which allowed for each criterion to be rated red, amber, or green (known as "RAG rating") with a score of 0, 1, or 2 as shown in figure 6.7.

Figure 6.6 – Audit score criteria

Figure 6.7 – Red / Amber / Green audit indicators



A detailed scoring methodology was developed. This specified the considerations required for awarding each score against criterion, to ensure consistency of approach. The criteria were assessed in a predominantly quantitative way. For example, quantifiable metrics such as distance parameters, design specifications, or number of occurrences, to differentiate between a red, amber, or green score.

As well as scorable criteria, the proformas also collected information relating to:

- road names,
- route length,
- route classification (prestige, primary, or secondary),
- on-road or off-road,
- hub or spoke route (yes or no),
- key employment (yes or no), and
- strategic priority (e.g., routes connecting key settlements) (yes or no).

6.2.2 Initial, desk-based, audits

The initial audits were undertaken using a desk-based, virtual approach. Google Street View imagery was used to view the routes, with the dates of the images recorded in the proforma. Where images were out of date or did not provide sufficient information for a conclusive audit, the route was flagged as 'review required' and included in the list of routes to be validated with site visits.

Longer routes were broken down at 'change of circumstance' points such as where a clear change in walking/wheeling/cycling provision or a significant difference in awardable score was identified.

Each route segment received a final score, which denoted the overall quality of the route.

6.2.3 Active travel site visits

Site visits focussed on:

- the areas of interest,
- hub or spoke routes,
- routes connecting to employment and education,
- growth locations, and
- routes which were flagged as 'review required' in the desk-based audits.

The site visits were undertaken on a weekday, during daylight hours. A training and safety briefing and quality control exercise was undertaken at the start of the site visit day, to ensure consistency of scoring.

Audit teams walked and cycled each of the routes, to ensure that they experienced the route as pedestrians and cyclists and that full consideration was given to the differing needs of all types of user.

6.2.4 Desk-based audit and site visit results

Figures 6.8 and 6.9 show the overall audit scores for each section of route in the Loughborough LCWIP area.

There is limited consistency along routes connecting key settlements. A single journey may involve travelling along high and low scoring segments of route. Even a short section of red or amber quality provision in an otherwise green route can be enough to deter people from travelling by bicycle or walking/wheeling.

The Nottingham Road link to Loughborough railway station and route segments connecting to it achieve lower than desirable scores for cycle access. This is a particular area of interest, as the station is a major transport hub for the Loughborough LCWIP area. The area around the station performs poorly for both cycling and walking and wheeling.

Loughborough town centre performs better for walking and wheeling than cycling. This is likely due to the existing pedestrianisation. However, walking and wheeling routes to key destinations such as the hospital, Loughborough College, and Loughborough University perform less well. These are key areas which will need to be improved to help achieve our CaWS targets to increase travel to education by cycling, walking and wheeling.

High quality LCWIP network routes must consider and address the distinct needs of all types of user.

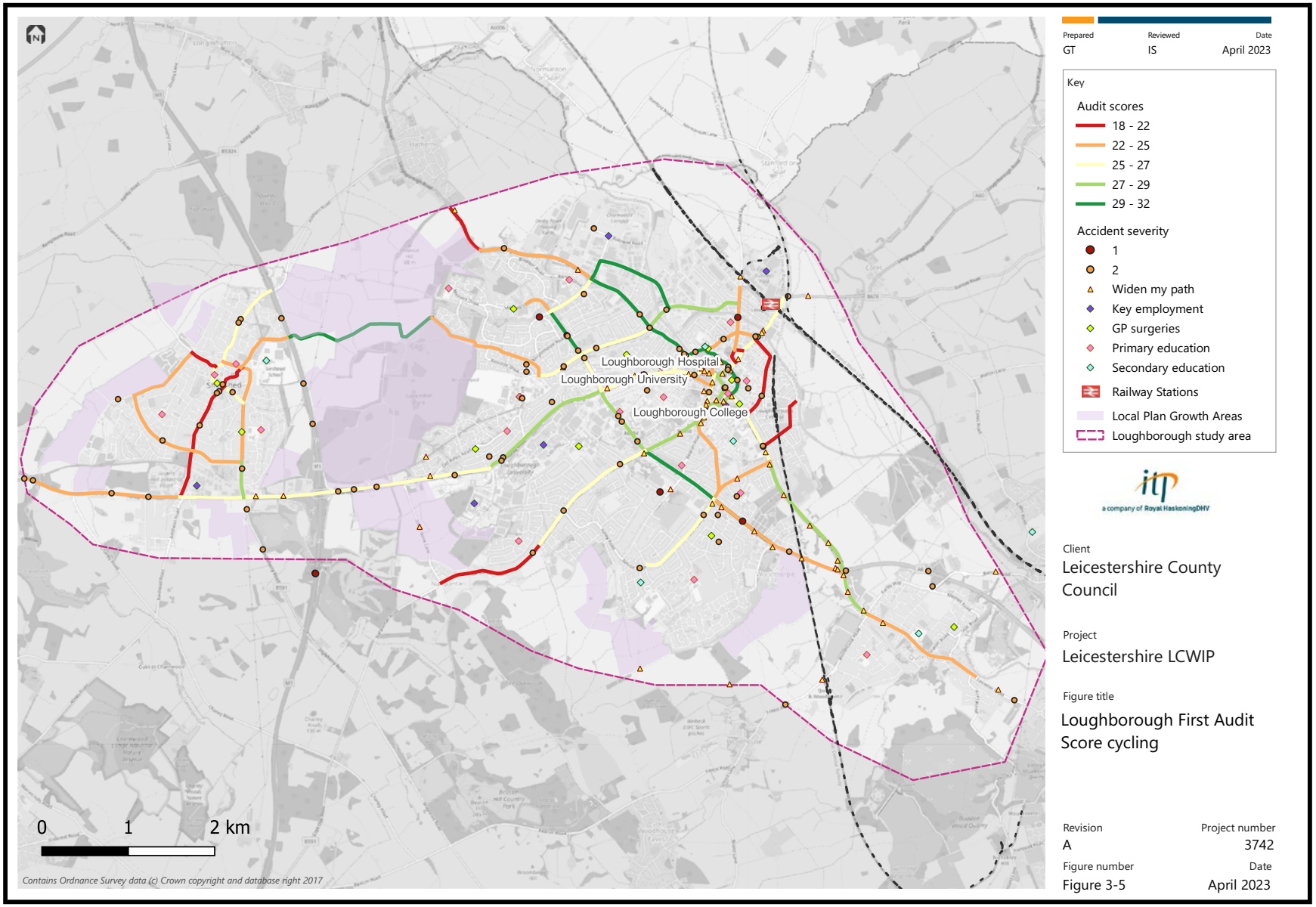


Figure 6.8 – Cycling audit scores

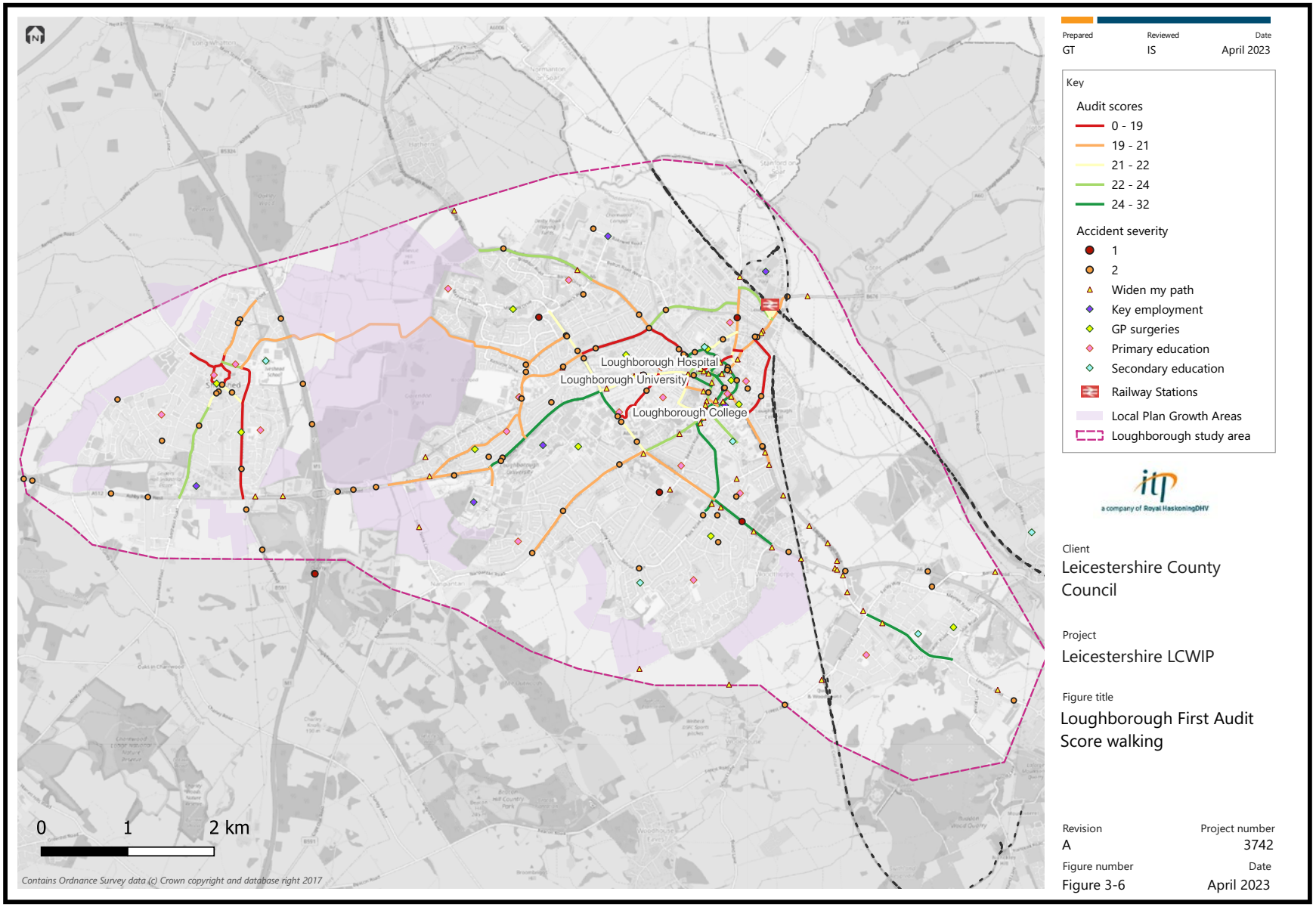


Figure 6.9 – Walking audit scores

6.2.5 Healthy Streets Design Check

The Healthy Streets Design Check toolkit was developed by Lucy Saunders, of Healthy Streets, in collaboration with Sustrans, Transport for London, and a number of local authorities. It has been adopted by the DfT as best practice for assessing how humans experience using streets as cyclists or pedestrians.

The approach emphasises the need to prioritise active travel, reduce the dominance of motor traffic, and create street environments which are safe, accessible, and attractive for all users. The tool uses 19 metrics, against 10 indicators, which each focus on a different aspect of being on the streets.

Each metric is scored on a four-point scale (0, 1, 2, or 3) and weighted according to its role in the 10 Healthy Streets indicators. On the four-point scale, zero indicates a poor street environment, whilst three indicates a good environment which is welcoming to all people who are walking/wheeling, cycling, or spending time in the street. The 19 metrics must all be scored to produce a final Healthy Streets score out of 100.

The toolkit does not define a threshold for an 'acceptable' quality of environment. Designers are encouraged to focus on maximising the increase in score between the original environment and the environment post-intervention.

The audits against the Healthy Streets Design Check toolkit found that routes within Loughborough town centre scored better than the routes extending out from the town centre towards other key destinations. The good scoring within the town centre can be attributed to existing characteristics, notably current motor vehicle restrictions through Market Place.

Scores for links between the town centre and the railway station score poorly, due in part to constrained footways and lack of segregation between cyclists and motor vehicles. This is consistent with the results of the desk-based and site visit audits.

The Healthy Streets Design Check toolkit encourages auditors to assess the weakest point along a route. This means that routes extending over a longer distance have more potential to score poorly. This applies to routes in the Loughborough LCWIP area including the A6, Leicester Road towards Quorn, and Forest Road / Nanpantan Road, where vehicle speeds and volume of traffic make the environment unattractive to pedestrians and cyclists.

Figure 6.10 – Healthy Streets Design Check indicators[18]

Figure 6.11, below, shows the full results of the Healthy Streets Design Check in the Loughborough LCWIP area.

[18] Healthy Streets.

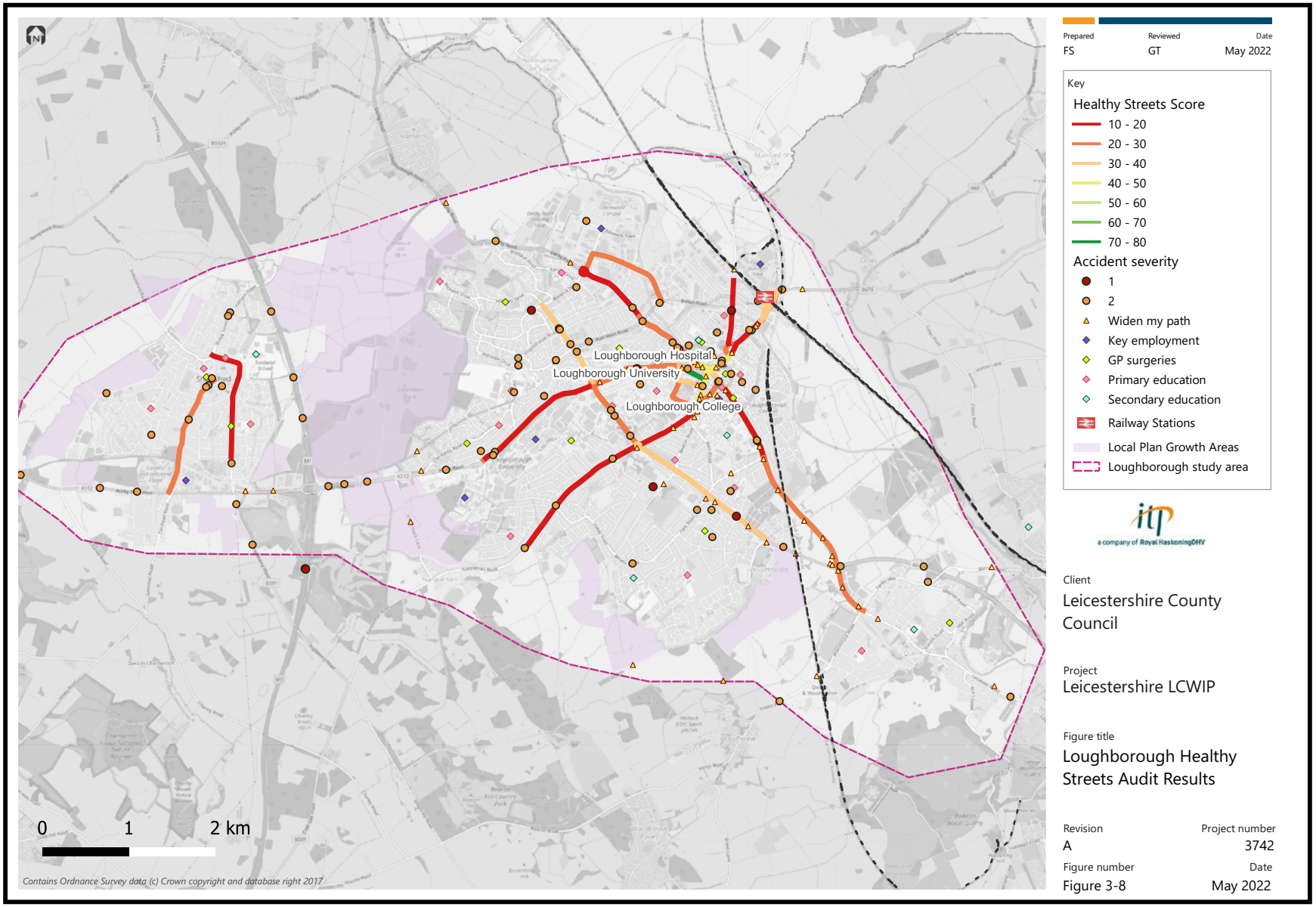


Figure 6.11 – Results of the Healthy Streets Design Check audit

6.3 Developing our 10-year pipeline of schemes and concept ideas

The completion of the auditing and Healthy Streets Design Checks highlighted the strengths and weaknesses of each route segment assessed against the 19 metrics and, ultimately, the 10 Healthy Streets Indicators. Based on the results of this detailed auditing, as well as our engagement process, we identified a long list of routes and key corridors which, if improved to the latest design standards including LTN 1/20, have the greatest potential to benefit people travelling actively in the Loughborough area, ensuring the needs of a diverse range of users are met.

The design team, guided by our level of ambition, and latest best practice, developed the proposed design features that would bring these routes up to the latest standards, improving active travel provision for all users.

This long list forms our initial 10-year pipeline of high-level schemes in the Loughborough LCWIP area.

Each of these routes were assigned a number, and the individual route sections were assigned letters for ease of identification throughout the process. They are referred to in this way throughout the LCWIP report. As a result of the process, the long list contains non-continuous reference numbers for corridors which are kept for consistency and continuity. Figure 6.12 and table 6.1, below show the long list of routes and design improvement features, which form our initial 10-year pipeline of schemes in the Loughborough LCWIP area.

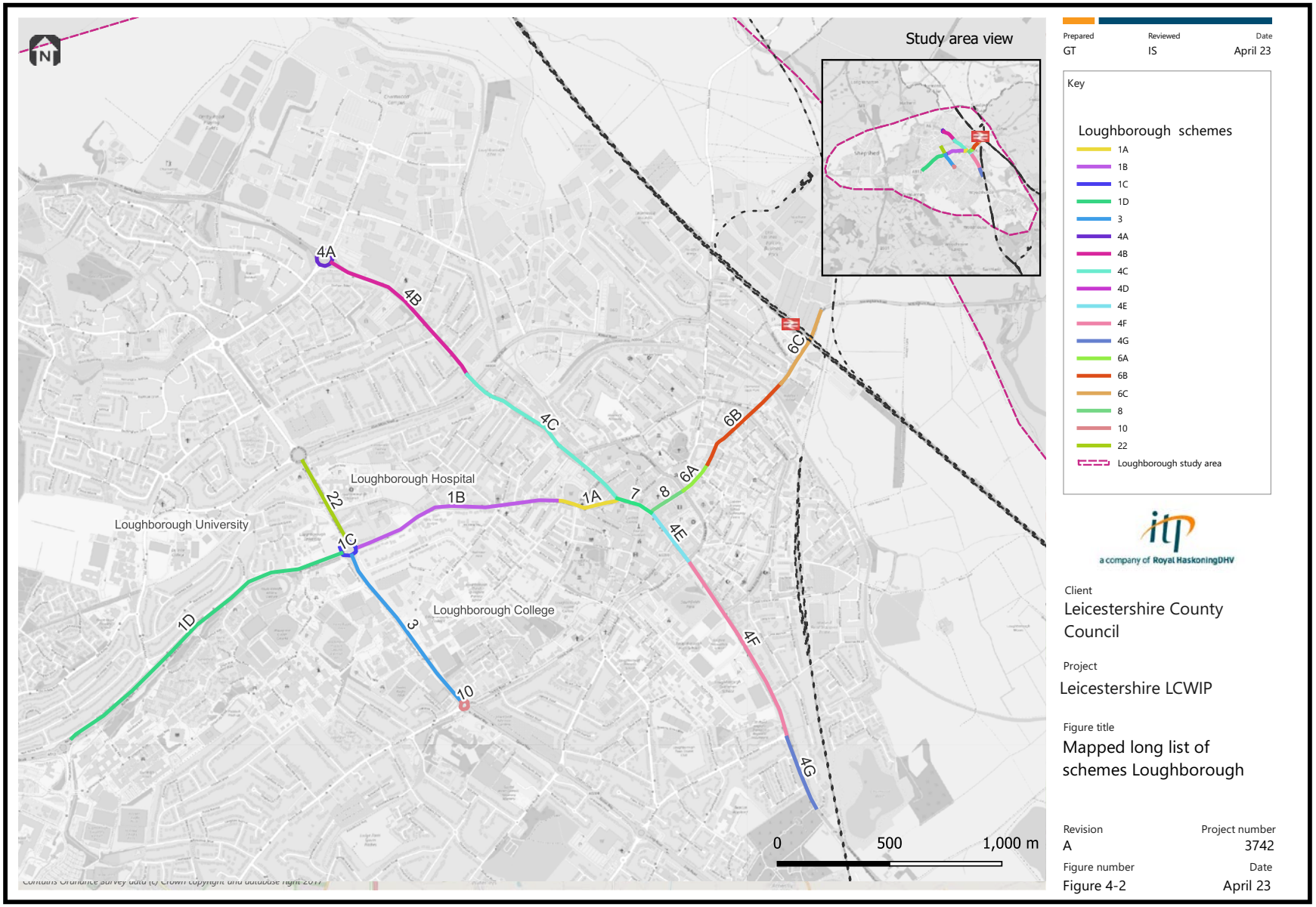


Figure 6.12 – Loughborough long list of schemes for consideration

Table 6.1 – Long list of Loughborough LCWIP 10-year pipeline schemes

Corridor No.	Corridor Name	Route ID	Road Name	Route Description and Improvements
Corridor 1	New Ashby Road, **Loughborough University**	1A	Ashby Road	Priority raised table crossing and existing signalised Ashby Road / Greenclose Lane junction upgraded to a two-stage right turn arrangement.
		1B	Ashby Road	Mixed traffic cycling along the quiet 30mph section near Loughborough University. Priority raised table crossing and upgraded segregated crossing.
		1C	Ashby Road roundabout	Ashby Road roundabout junction only. 'Hold the left' signalised roundabout with two-way segregated cycle track, parallel crossings.
		1D	A512	Mixed traffic cycling along the quiet parallel road of New Ashby Road and a segregated cycleway westbound. Upgraded segregated crossings, priority side road crossings, bus stop with cycle bypass, bus shelters.
Corridor 3	Epinal Way, **Loughborough College**	3	A6004 Epinal Way	Ashby Road roundabout to Forest Road roundabout. Segregated cycleways, upgraded segregated crossings, priority raised table crossings
Corridor 4	A6 Derby Road / A6 Leicester Road	4A	Bishop Meadow roundabout	Bishop Meadow roundabout only. Segregated cycleway, low level vegetation and crossing upgrades.
		4B	A6 Derby Road	Bishop Meadow roundabout to Clifford Road. Segregated cycleways, upgraded segregated crossings, two-stage right turn junction arrangement, priority side road crossing and low-level vegetation.
		4C	A6 Derby Road	Segregated cycleways, upgraded segregated crossings, two-stage right turn junction arrangement, priority side road crossing and low-level vegetation.
		4E[19]	High Street / A6 Leicester Road	Segregated cycleways, one-way arrangement for vehicles along High Street, two-stage right turn junction arrangement.

[19] Route ID 4D related to Swan Street. It has been incorporated into Corridor 7 due to the overlap between corridors and the need to be able to consider this segment in isolation.

Table 6.1 – Long list of Loughborough LCWIP 10-year pipeline schemes cont'd

Corridor No.	Corridor Name	Route ID	Road Name	Route Description and Improvements
Corridor 4 (cont'd)	A6 Derby Road / A6 Leicester Road	4F	A6 Leicester Road	Barrow Street to Shelthorpe Road. Segregated cycleways and priority raised table crossing.
		4G	A6 Leicester Road	Shelthorpe Road to Cedar Road. Segregated cycleway, two-stage right turn junction arrangement and segregated cycle and priority raised table crossings.
Corridor 6	Nottingham Road, **Loughborough Town Centre to Loughborough Station**	6A	The Coneries	Segregated cycleways and upgraded junctions to two-stage right turn arrangement.
		6B	Nottingham Road	'Beacon Bingo' bus stop to Nottingham Road canal bridge. Segregated cycleway and mixed traffic cycling, limiting on-street parking. Priority raised table crossing.
		6C	Nottingham Road	Nottingham Road canal bridge to Loughborough railway station. Segregated cycleway and mixed traffic cycling. Upgraded segregated crossings.
Corridor 7	Swan Street, **Loughborough Town Centre**	7	Swan Street / High Street	Derby Square to Baxter Gate. Two-way segregated cycleway, pocket park, and vehicle restriction maintained.
Corridor 8	Baxter Gate, **Loughborough Town Centre**	8	Baxter Gate	High Street to Jubilee Way. Segregated cycleways, bus stop with cycle bypass.
Corridor 10	Forest Road roundabout	10	A6004 Epinal Way / Forest Road roundabout	Forest Road roundabout junction only. Signalised roundabout with two-way segregated cycle track, parallel crossings and raised priority crossing with planted vegetation.
Corridor 20	**Loughborough Town Centre**	20	Multiple roads within Loughborough Town Centre	Exact location(s) to be confirmed. 20mph zone.
Corridor 22	Epinal Way / A6004	22	A6004 Epinal Way	Alan Moss Road roundabout to Ashby Road roundabout. Segregated cycleway, compact roundabout, and priority side road crossings.

6.3.1 Area wide improvement measures, as part of our 10-year pipeline

6.3.1.1 Traffic calming and speed reduction measures

The public feedback included requests for traffic calming and speed reduction measures, for the safety of cyclists and pedestrians and to create a more pleasant environment for active travel. These types of measures may include the introduction of 20mph zones or limits on parts of the network.

Loughborough town centre has been identified as an area which could potentially benefit from the implementation of a 20mph zone or limits.

We will consider the nature of the road and the surrounding area when deciding whether a scheme to reduce the speed limit is appropriate as part of an assessment of road safety. For example, distributor roads like the A6 are unlikely to be included in any 20mph zone schemes as the roads' intended function is to move vehicle traffic quickly from residential areas to major roads.

The introduction of any schemes to reduce speed limits, including any 20mph zones, will be subject to road safety assessments, discussion with the emergency services and public consultation. It would also be dependent on funding availability, in the same way as other LCWIP schemes.

6.3.1.2 Benches and cycle parking

The inclusion of benches and cycle parking in walking/wheeling and cycling improvement schemes has been found to have a significant effect on the number of people travelling by active modes, for relatively low costs. Where appropriate, these elements have been incorporated into the concept designs for the short list of scheme ideas set out in 6.5, below.

Where the only improvements required to a route are the addition of benches, cycle parking, or other 'small scale' measures, these will be delivered, subject to funding availability, in the same way as other LCWIP schemes.

6.3.1.3 Cycle repair stations

Cycle repair stations are a low-cost form of infrastructure that, if installed in key locations, can help encourage cycling and wheeling. These repair stations generally include a range of tools and tire pump to help keep people moving.

6.3.1.4 Initial wider area schemes identified as part of the long list of schemes

The wider area schemes as described above, such as bench seating, cycle parking and cycle repair stations that have been identified, are also included in our 10-year pipeline of schemes. It is expected that these types of wider area schemes that support active travel will be included in many larger schemes, and potentially more will be identified as the schemes progress through design stages, public engagement, and delivery, once funding is secured. Table 6.2, below, shows the type and location of initial wider area schemes identified, which are also included in the 10-year pipeline.

Table 6.2 - Initial wider area schemes included in 10-year pipeline

Road Name	Description and Improvement
Queens Park, Loughborough Town Centre	Total 3 no. bike lockers and bike repair point
Student Union, Loughborough University	Bike repair point
Loughborough College	Bike repair point

6.4 LCWIPs and other infrastructure projects and programmes

Schemes proposed through LCWIPs are part of the wider delivery of highway schemes across the county. Government guidance sets out that all highway schemes must consider active travel in their design and delivery. If active travel provision is not required, then this must be clearly evidenced where schemes are fully or partly funded by Government. Under our area transport strategies, supporting local plan development and other delivery mechanisms, a range of active travel improvement schemes are proposed and delivered in areas both covered by LCWIP areas and not. For example, we continue to seek funding toward delivery of packages of smaller local connectivity schemes, which include lower cost schemes such as dropped access kerbs, minor footway cycle way/track improvements, in addition to specific safety led improvements and accessibility improvements to improve connectivity across existing facilities.

6.5 Going the extra step – developing a short list of concept scheme ideas

From the long list of schemes which represents our 10-year pipeline, a short list of routes was selected to be taken forward to concept design stage. At this stage, the broad idea for a scheme is drawn as a high-level plan. The purpose of preparing concept designs was to explore the 'art of the possible' for differing route characteristics, on a corridor basis (as opposed to individual locations treated in isolation from each other) and reflecting the outputs of the original sifting methodology, route audits, and Healthy Streets Design Check. Interlinking sections of route were chosen, to avoid fragmentation or the risk of increasing inconsistency along route corridors. Having concept scheme drawings helps when engaging with local communities on what types of measures could be provided to improve active travel, as well as supporting future funding bids. The schemes which were selected to be shortlisted for concept design are shown in figure 6.13 and table 6.3.

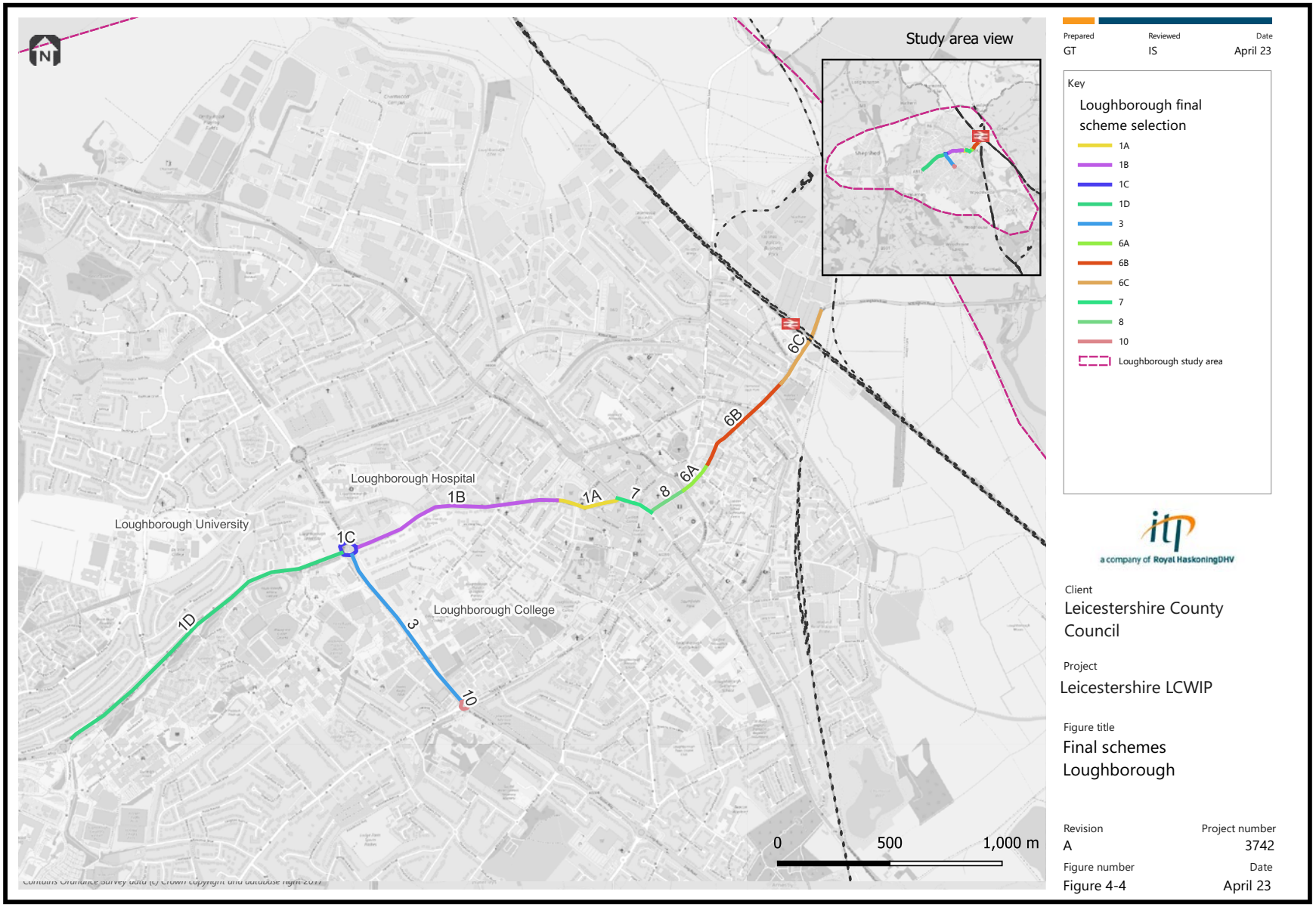


Figure 6.13 – Schemes selected for concept design in the Loughborough LCWIP area

Table 6.3 – Short list of schemes selected for concept design

Corridor No.	Corridor Name	Route ID	Road Name	Route Description	Why selected
Corridor 1	New Ashby Road, **Loughborough University**	1A	Ashby Road	Ashby Road / Greenclose Lane junction	Chosen as it is part of a key corridor connecting the town centre to the University and future local plan growth sites such as Garendon Park as identified by route auditing and the Healthy Streets Design Check.
		1B	Ashby Road	30mph section near Loughborough University	
		1C	Ashby Road roundabout	Ashby Road roundabout junction only	
		1D	A512	Parallel road of New Ashby Road	
Corridor 3	Epinal Way, **Loughborough College**	3	A6004 Epinal Way	Ashby Road roundabout to Forest Road roundabout	Chosen as it is a barrier to east-west movements across the town, from the University to the town centre, as identified by route auditing and the Healthy Streets Design Check.
Corridor 6	Nottingham Road, **Town Centre to Train Station**	6A	The Coneries	The Coneries	Chosen as it is a key route connecting a major transport hub to the town centre and is a key aspiration for improvement, as identified through engagement with local stakeholders.
		6B	Nottingham Road	'Beacon Bingo' bus stop south of Cradock St to Nottingham Road canal bridge	
		6C	Nottingham Road	Nottingham Road canal bridge to Loughborough railway station	

Table 6.3 – Short list of schemes selected for concept design cont'd

Corridor No.	Corridor Name	Route ID	Road Name	Route Description	Why selected
Corridor 7	Swan Street, **Town Centre**	7	Swan Street / High Street	Derby Square to Baxter Gate	Chosen as it is a key connector through the town centre, including the pedestrianised area, as identified by the route auditing.
Corridor 8	Baxter Gate, **Town Centre**	8	Baxter Gate	High Street to Jubilee Way	Chosen as it is a key connector through the town centre, as identified by the route auditing.
Corridor 10	Forest Road Roundabout	10	A6004 Epinal Way / Forest Road roundabout	Forest Road roundabout junction only	Chosen as it is a barrier to east-west movements across the town, from the University to the town centre, as identified by route auditing and the Healthy Streets Design Check.

The selected scheme ideas were developed into 2D concept designs using AutoCAD design software. The designs were primarily guided by LTN 1/20 and the Design Manual for Roads and Bridges, but also considered the core design principles identified in the Walking Route Audit Tool and Route Selection Tool (see figure 6.5, above), the LCWIP technical guidance, and the Healthy Streets design principles.

The Healthy Streets Design Check toolkit encourages designers to consider how to minimise zero scores. Therefore, consideration was also given to specific placement of design features which can help to make cycling and walking/ wheeling more appealing to a wide range of users, including trees, benches, and pocket parks.

The intervention options which are available for each route depend on the nature of the road and the surrounding area. For example, roads which have a distributor or proxy distributor function, where there are no alternative routes for vehicles, or where there are physical constraints, such as the overall width of the pavement and road, may be restricted in terms of the active travel infrastructure which can be installed.

The types of highway design features which were considered during development of the concept ideas included:

- CYCLOPS (Cycle Optimised Protected Signals) Junctions,
- Dutch style roundabouts. These designs include parallel crossings for pedestrians and cyclists to give them priority over motorised traffic,
- speed reduction for motorised vehicles,
- floating bus stops, with shelter and seating,
- additional pedestrian crossing points, both informal and signalised,
- segregated cycle lanes, and
- junction improvements for cyclists and pedestrians, including
    - separate signal stages
    - advanced stop lines
    - reduced crossing distances.

Table 6.4, below, shows examples of some of these features.

Design logs were used to record the justification for design choices. These helped to ensure that proposed major infrastructure is complementary to that proposed on adjacent scheme sections.

Table 6.4 – Examples of design features which were considered during concept scheme development

Low-level rainwater garden

Pocket park

Segregated one-way cycleway

Side road entry treatment/raised table, with cycle crossing

Dutch-style entrance kerbs

Bi-directional cycleway

CYCLOPS junction

Floating bus stop, with cycle bypass

Advanced stop lines

Parallel crossing

On-carriageway cycling

Cycle signals

6.6 Assessing the potential impact of the concept scheme ideas

Healthy Streets Design Checks were repeated, this time with the assumption that all of the measures identified in the concept designs for each route section were implemented. The new scores were compared to the scores for the route sections in their existing state. The difference between the two sets of scores indicated how effective the proposed interventions are likely to be.

An overall assessment for each corridor, combining the scores for each individual section, would hide the strengths and weaknesses of each section. Therefore, the assessments were carried out on individual sections and there were no assessments made of the overall corridors.

Improvements on route sections in the Loughborough LCWIP area ranged from a 2-point increase to a 14-point increase when all ten Healthy Streets indicators were considered. The three sections which received the greatest point increase were Epinal Way (route ID 3), which received a 14-point increase, Nottingham Road (route ID 6B), which received a 12-point increase, and the A512 (route ID 1D), which received an 11-point increase. Table 6.5 sets out details of the interventions which are proposed for each of these route sections.

Table 6.5 – Top-scoring intervention proposals for the Loughborough LCWIP area

Route ID	Before Score	After Score	Change	Intervention Proposals
3	27	41	+14	• Segregated 1-way cycleway (2m wide, 0.5m buffer) northbound and southbound along Epinal Way • Upgrades to existing informal crossings to segregated toucan crossing • Upgrade existing toucan crossings to segregated toucan crossings • Low-level rainwater garden and provision of a pocket park and benches for public realm improvement • Priority crossing on raised table with partial set back
6B	18	30	+12	• Segregated 1-way cycleway (1.5m wide, 0.5m buffer) at the Coneries • Mixed traffic cycling as per LTN 1/20 section 7.1, due to existing location constraints at Nottingham Road • Priority crossing on raised table with partial set back • Floated parking arrangement

Table 6.5 – Top-scoring intervention proposals for the Loughborough LCWIP area cont'd

Route ID	Before Score	After Score	Change	Intervention Proposals
1D	18	29	+11	• Segregated 1-way cycleway (2.0m wide, 1.0m buffer) westbound • Mixed traffic cycling along the quiet parallel road of New Ashby Road eastbound, as per LTN 1/20 section 7.1 • Convert existing bus layby into a floated bus stop with cycle bypass • Priority crossing on raised tables with partial set back • Segregated toucan crossings

Table 6.6, on the next page, shows the improvement in scoring across all of the schemes.

The interventions which resulted in the greatest improvement between the 'before' and 'after' Healthy Streets Design Checks included:

- segregated protection for cyclists from cars and other motorised vehicles,
- rainwater gardens,
- tree planting,
- new crossing points, and
- bus bypasses.

Applying these interventions in line with LTN 1/20 and the CaWS would significantly improve routes which carry a large volume of cars, vans, and HGVs.

Table 6.6 – Detailed before and after Healthy Streets Design Check scores

Audit Route ID	Everyone feels welcome		Easy to cross		Shade and Shelter		Places to stop and rest		Not too noisy		People chose to walk and cycle		People feel safe		Things to do see and do		People feel relaxed		Clean air		Healthy Streets Score Before	Healthy Streets Score After	Change
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After			
1A	39	49	21	33	67	67	53	53	33	33	39	49	26	31	67	67	39	49	17	17	40	45	+5
1B	30	32	25	25	0	0	13	13	33	33	30	32	31	31	11	22	30	32	17	17	22	24	+2
1C	31	35	21	25	33	33	8	8	27	27	31	35	28	31	44	44	31	35	17	17	27	29	+2
1D	19	39	8	38	17	17	0	7	27	27	19	39	18	38	44	44	19	39	8	8	18	29	+11
3	31	52	17	46	33	33	17	47	20	20	31	52	26	51	56	56	31	52	8	8	27	41	+14
6A	46	49	54	54	17	17	27	27	33	33	46	49	46	49	67	78	46	49	25	25	41	43	+2
6B	18	37	13	38	0	0	7	20	40	40	18	37	21	41	22	22	18	37	25	25	18	30	+12
6C	40	49	25	38	17	17	33	40	27	27	40	49	31	44	78	78	40	49	8	8	34	40	+6
7	54	65	50	58	33	33	58	67	47	53	54	65	46	59	67	78	54	65	33	42	50	58	+8
8	53	56	46	50	67	67	60	60	33	40	0	0	38	41	78	78	53	56	25	33	50	54	+4
10	41	52	42	46	33	33	8	8	27	27	41	52	44	54	44	44	41	52	8	8	33	38	+5

7. Prioritising our 10-year pipeline

The LCWIP technical guidance sets out a suggested approach for prioritising improvements based on effectiveness, cost, and deliverability. We built on this approach to undertake prioritisation assessments and develop a prioritised 10-year pipeline of locations for improvement from the long list of locations set out in chapter 6, above.

7.1 Prioritisation criteria

In order to establish the priority order of schemes, each scheme was assessed against five factors:

- effectiveness,
- attractiveness,
- policy,
- economics (cost, economic benefits, and value for money),
- deliverability,

Table 7.1 shows how the schemes were assessed against each criterion.

Table 7.1 – How the prioritisation criteria were assessed

Criteria	How it was assessed
Effectiveness	
Potential to encourage new walking trips	Access to key destinations
Potential to encourage new cycling trips	Number of vehicle trips under 10km
Population who directly benefit from the intervention	Number of residents living in the area around the intervention, based on 2011 Census data
Potential to improve road safety	Number and severity of pedestrian and/or cyclist accidents from 2015-2019
Attractiveness	
Healthy Streets score	Overall Healthy Streets score
Policy	
Improvement in air quality (1)	Proximity to an Air Quality Management Area
Improvement in air quality (2)[20]	Place Based Carbon Calculator car emissions grade
Links to or through an area of deprivation	Indices of Multiple Deprivation deciles
Proximity to schools or education	Distance from a school, college, or university
Importance of the intervention as defined through the engagement process	Extent to which the route or area was raised as being in need of improvement during the stakeholder and public consultation process
Improved multimodal transport connections	Distance from a rail station, bus station, park & ride, or other key transport route
Economic	
Value for money	Active Mode Appraisal Toolkit (AMAT) benefit-cost ratio (BCR), based on a 40-year appraisal period
Proximity to a major growth site	Distance from Local Plan committed developments (at least 100 houses or jobs by 2036)
Deliverability	
Scheme feasibility	Land ownership, based on whether the route is on county highway National designation, based on whether the route falls within a protected area (Site of Special Scientific Interest, conservation area, parks & gardens, scheduled monument, listed building etc)

[20] The scores for the two air quality criteria were averaged, to ensure that air quality wasn't given a greater weighting than other factors.

7.2 Economic assessment

Economic assessment is a crucial part of appraising whether the benefits of a scheme outweigh the costs of implementing it. Economic assessment for walking and cycling schemes, including those developed for delivery as part of LCWIPs, is carried out using the Active Mode Appraisal Toolkit.

7.2.1 Active Mode Appraisal Toolkit (AMAT)

The AMAT is a DfT-produced tool to assess the overall benefits and costs of proposed cycling and walking/wheeling schemes. It is spreadsheet-based and accompanied by an Active Mode Appraisal Toolkit User Guide. The User Guide sets out how the tool is to be used and the process which should be undertaken to complete an assessment in the AMAT.

Several AMAT spreadsheets have been completed for each of the proposed schemes, using the 'User Interface Intervention' inputs shown in appendix B.

7.2.2 Cycling and walking/wheeling demand

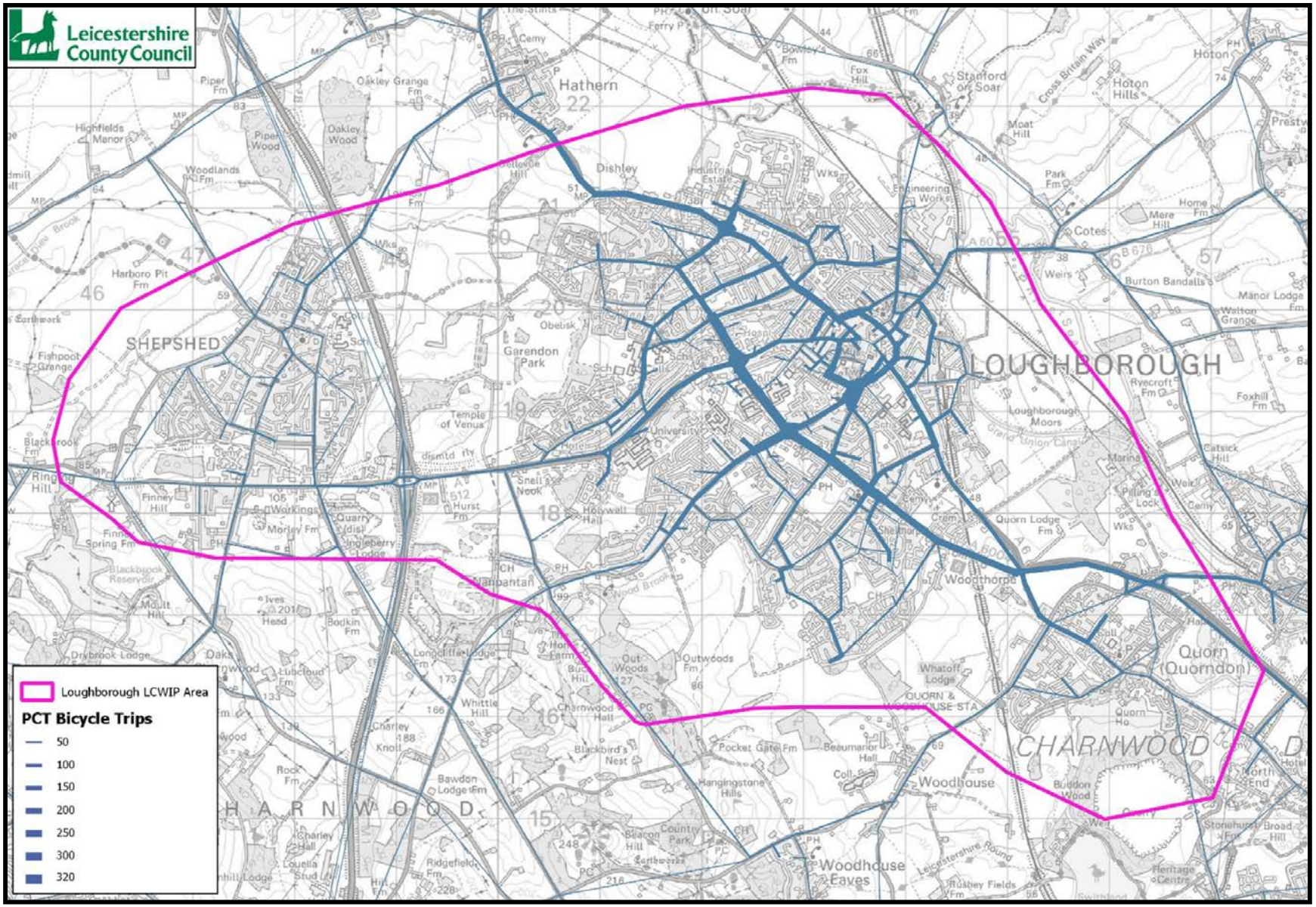
VivaCity smart traffic monitoring sensors have recently been installed around the study area. However, the sensors have not been in place for a full year, so there was insufficient data to determine the average level of walking/wheeling and cycling use on these routes. Therefore, we relied upon established tools to analyse cycling and walking/wheeling on these routes, both in the current situation (without the scheme) and in the future (with the scheme).

7.2.2.1 Before intervention

7.2.2.1.1 Cycling trips

For corridor schemes, the number of cycling trips without the proposed scheme was determined using the route network (Lower Super Output Area) data from the Propensity to Cycle Tool (PCT). This data includes the number of weekday cycling trips assumed along each link, based on 'main mode of travel to work' data from the 2011 Census. Where more than one option was available for a scheme, the highest trip rate was used for the AMAT. Figure 7.1, below, shows the levels of bicycle trips as identified in the PCT over the whole LCWIP network, from which specific PCT data for the relevant corridors were used.

Figure 7.1 – Cycling trips as shown in the Propensity to Cycle Tool (PCT)



This data was supplemented with information from the National Travel Survey (NTS) Table NTS0409,[21] to calculate what percentage of total cycling trips was commuters. According to NTS data, commuters made up 33.59% of all cycling trips. In addition, the AMAT User Guide states that 90% of all cycling trips result in a return cycling journey on the same day. Therefore, the total number of cycling trips identified in the NTS data was uplifted to account for non-commuting and return journeys.

[21] Purpose of travel, Department for Transport, updated August 2022.

7.2.2.1.2 Walking and wheeling trips

The number of walking and wheeling trips without the proposed scheme was determined using travel to work data from the DataShine Tool.[22] This tool is a collection of Census data presented in a mapping platform, developed by researchers at University College London and partially funded by the Economic and Social Research Council.

The data includes the number of weekday walking and wheeling trips for each Lower Super Output Area at the time of the 2011 Census. In order to determine the number of walking and wheeling trips on a specific section of road, the number of trips per metre of the road network in the associated area was calculated. This figure was then multiplied by the length of the proposed route.

The DataShine Tool data only includes commuting trips, which made up only 7.08% of walking and wheeling trips in 2018. In addition, it does not include return journeys. Therefore, the total number of walking and wheeling trips identified in the data was uplifted to account for non-commuting and return journeys.

[22] Layer QS701EW0011 – Number of trips 'on foot', DataShine Blog, Oliver O'Brien & James Cheshire, 2016 (Interactive mapping for large, open demographic data sets using familiar geographical features, Journal of Maps, 12:4, 676-683, DOI: 10.1080/17445647.2015.1060183).

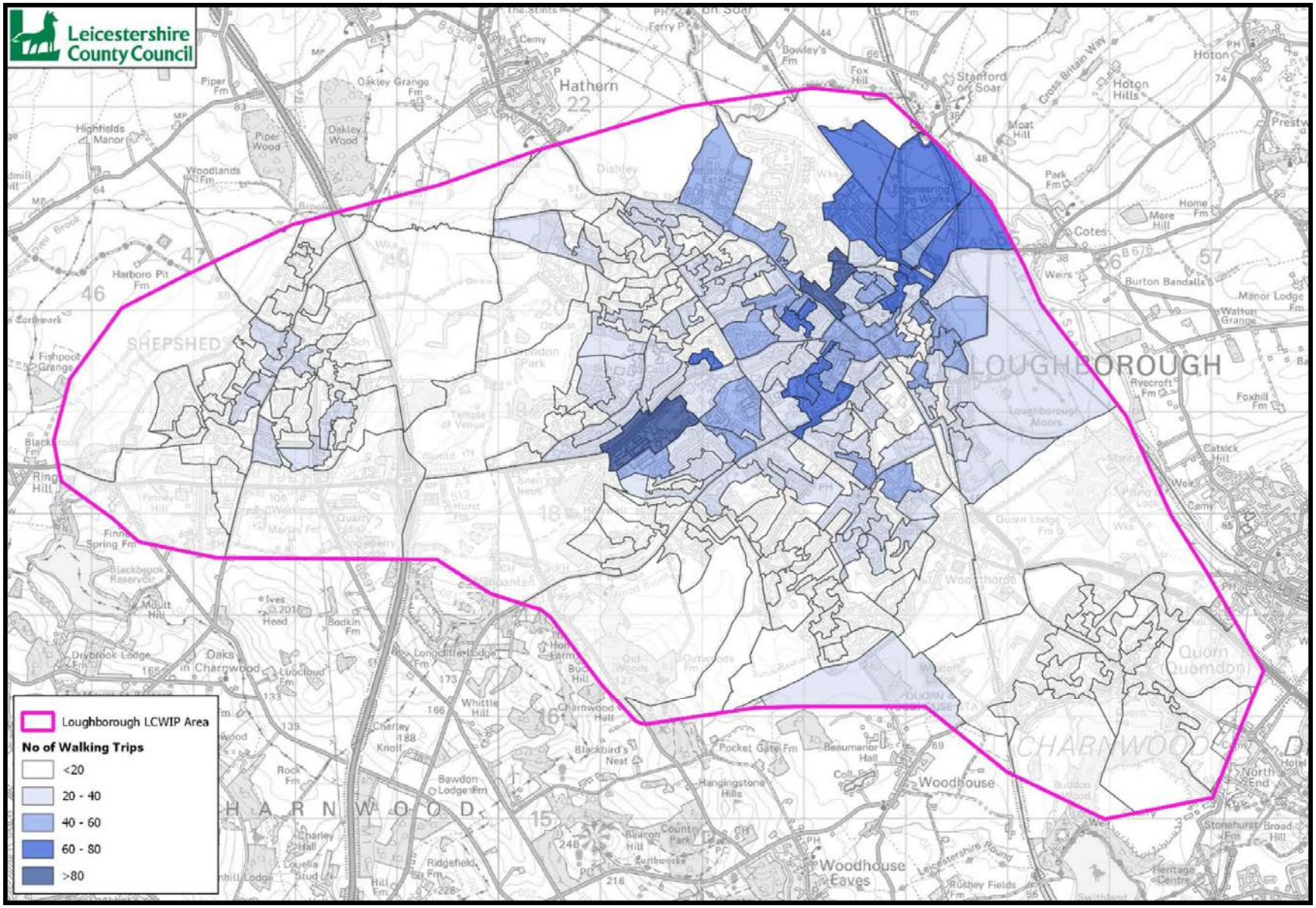


Figure 7.2 – Commuting walking trips as shown in the DataShine Tool

7.2.2.2 After intervention

A key part of assessing the potential benefits of the proposed scheme ideas is understanding the likely increase in cycling, walking and wheeling trips as a result of the scheme.

The number of cycling, walking and wheeling trips with the proposed intervention has been estimated using the Active Travel England Uplifts Tool. The tool estimates the increase in weekday trips 'based on data for scheme cost, evaluation evidence for the cost effectiveness of past spending by infrastructure type and estimates for the relative cost effectiveness of spending by area'. It was developed using pre-COVID evaluation evidence and was informed by a comprehensive literature review of around 200 studies.

The Uplifts Tool was completed for each of the proposed schemes using the following inputs:

- scheme name,
- local authority,
- total scheme cost,
- pre-intervention walking and cycling trips (per weekday),
- scheme cost by infrastructure category, and
- percentage difference between scheme and benchmark costs,

The tool gives a range of estimated walking and cycling trips with the proposed scheme. The central estimates, based on the intrinsic cycling and walking potential and car ownership in the local authority area, have been used for the AMAT.

Table 7.2 – Daily cycling and walking trips without and with the proposed intervention

		Cycling				Walking	
		Without Scheme	With Scheme			Without Scheme	With Scheme
Corridor No.	Corridor Segment	PCT 2011 Census	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	All Scenarios
1	1A	119	176	243	786	216	280
	1B	391	446	713	2101	210	272
	1C	1137	1348	1827	4508	57	294
	1D	622	846	1035	2738	970	1222
3	3	1307	1479	2076	4842	509	702
4 (NW)	4A	277	361	458	1177	58	152
	4B	1522	1747	2602	6680	239	492
	4C	1063	1238	1816	4763	927	1123
4 (SE)	4E	45	219	68	167	127	323
	4F	588	819	1075	2947	153	412
	4G	334	383	628	1878	13	68
6	6A	747	775	1335	3552	99	166
	6B	368	472	628	1657	661	778
	6C	170	309	277	939	169	325
7	7	119	223	232	667	131	248
8	8	34	75	68	187	162	208
10	10	1307	1524	2076	4842	56	300
22	22	843	965	1324	3241	238	375

7.2.3 Scheme costs

The proposed schemes are at a very early stage of development. Therefore, work to assess the likely costs of the improvements has been based on the concept design work and will be subject to refinement as the designs are developed further. The scheme costs for the AMAT are comprised of:

- the costs of constructing the scheme ('investment costs'), and
- the costs of maintaining the scheme ('operating costs').

In order to provide detailed investment cost estimates for the AMAT, indictive costings were developed based on an average per meter cost of similar schemes. For the 18 schemes which were prioritised for concept design, the investment cost estimates were based on the design work undertaken to date.

The operating costs were based on a programme of 10-year minor maintenance and 20-year major maintenance for similar schemes in the LCWIP area. The indicative costs based on the early work which we have done are set out in section 7.5.2, and below (see table 7.3).

The indicative cost to deliver the initial 10-year pipeline of priority active travel schemes is in the region of £36,350,000. This initial 10-year pipeline of schemes represents only part of the total number of improvements that could be made over the entire priority network defined in this LCWIP, in order to bring it up to the latest active travel design standards. This initial indicative cost of the 10-year pipeline of priority schemes is an early indication of the level of investment required to bring our highway spaces and infrastructure up to an appropriate standard to meet the Government's Cycling and Walking Investment Strategy ambitions and deliver the transformation change in the way our communities travel for short distances.

Table 7.3 – Indicative cost estimates for schemes

Corridor No.	Corridor Segment	Street(s)	Indicative Costs (including maintenance)
1	1A	Ashby Road	£500,000
	1B	Ashby Road	£960,000
	1C	Ashby Road roundabout	£2,510,000
	1D	A512	£2,800,000
3	3	A6004 Epinal Way	£1,720,000
4	4A	Bishop Meadow roundabout	£760,000
	4B	A6 Derby Road	£2,940,000
	4C	A6 Derby Road	£5,500,000
	4E	High Street / A6 Leicester Road	£1,890,000
	4F	A6 Leicester Road	£3,180,000
	4G	A6 Leicester Road	£440,000
6	6A	The Coneries	£500,000
	6B	Nottingham Road	£940,000
	6C	Nottingham Road	£1,430,000
7	7	Swan Street	£990,000
8	8	Baxter Gate	£340,000
10	10	Forest Road roundabout	£2,770,000
22	22	Epinal Way / A6004	£6,180,000
		Total Indicative Cost Estimate:	**£36,350,000**

7.2.4 Value for money assessments

The AMAT provides a measure of the Value for Money (VfM) of a scheme, in the form of a benefit-cost ratio (BCR). A BCR above 1 indicates that each pound spent is expected to generate more than a pound's worth of benefits. Table 7.4 shows how DfT categorises value for money based on BCR scores.

Table 7.4 – Value for Money categories and equivalent BCR scores

VfM Category	Implied by…
Very High	BCR greater than or equal to 4
High	BCR between 2 and 4
Medium	BCR between 1.5 and 2
Low	BCR between 1 and 1.5
Poor	BCR between 0 and 1
Very Poor	BCR less than or equal to 0

BCRs were developed for each of the schemes. For robustness, multiple BCR assessments were undertaken, based on 20-year and 40-year appraisal periods and using 3 scenarios for increased cycling:

- **PCT 2011 Census** – cycling levels as identified using the PCT as set out in 7.3.2.1.1.,
- **Government Target** – a doubling of cycling nationally, occurring as a function of trip distance and hilliness plus several sociodemographic and geographical characteristics (including age, sex, ethnicity, car ownership, and income deprivation), and
- **Go Dutch** – represents what would happen if Dutch cycling levels were reached in England and Wales.

Table 7.5 demonstrates how the BCR scores change, depending upon the appraisal period and scenario used. As expected, the BCR scores for the Government Target and Go Dutch scenarios are much higher than those using the PCT.

Table 7.5 – Number of proposed corridor segments in each Value for Money category, by appraisal period and scenario

	20-Year Appraisal			40-Year Appraisal		
BCR	**PCT 2011 Census**	**Government Target Scenario**	**Go Dutch Scenario**	**PCT 2011 Census**	**Government Target Scenario**	**Go Dutch Scenario**
No of Segments with a BCR >=4	0	5	16	0	11	17
No of Segments with a BCR 2 – 4	0	6	1	16	5	0
No of Segments with a BCR 1.5 - 2	8	3	0	0	0	1
No of Segments with a BCR 1 – 1.5	8	2	1	1	2	0
No of Segments with a BCR 0 – 1	2	2	0	1	0	0
No of Segments with a BCR <=0	0	0	0	0	0	0

Details of the BCRs for all of the route segments can be found in appendix C. The BCRs for the wider corridors have also been established, based on an average of the segments that make up the overall route. The routes scoring higher BCRs are Baxter Gate, the A512, and the corridor from Loughborough Station to Loughborough University.

Table 7.6 – Average BCRs for full corridor schemes

Location	Corridor Segments	20-Year Appraisal			40-Year Appraisal		
		PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario
Baxter Gate (South of the A6)	8	1.64	1.45	4.66	3.09	2.74	8.82
A512	1A / 1B / 1C / 1D	1.52	3.76	17.21	2.85	7.06	32.59
Train Station - University	6C / 6B / 6A / 8 / 7 / 1A / 1B / 1C / 1D	1.52	3.79	16.82	2.84	7.14	31.98
Town Centre - Train Station	6A / 6C / 6C	1.48	5.34	24.05	2.77	10.09	45.95
A6 (South East)	4E / 4F / 4G	1.39	3.19	14.54	2.61	5.97	27.42
A6 (inc. Town Centre)	4A / 4B / 4C / 7 / 4E / 4F / 4G	1.33	2.82	12.15	2.49	5.28	22.92
A6004 (Ashby Road roundabout - Forest Road junction)	3	1.30	4.34	18.57	2.47	8.28	35.55
A6 (North West)	4A / 4B / 4C	1.21	2.86	11.89	2.27	5.37	22.45
A6004 (Forest Road roundabout)	10	1.07	2.91	12.20	2.00	5.47	23.00
Epinal Way	22 / 1C / 3 / 10	0.94	2.72	11.71	1.77	5.15	22.26
A6004 (Alan Moss roundabout - Ashby Road roundabout)	22	0.26	0.78	3.54	0.49	1.47	6.72

7.3 Using stakeholder and public engagement feedback in prioritisation

It is essential that the location and nature of the LCWIP improvements meet the needs of the communities that are going to use the LCWIP cycling, walking and /wheeling networks. The data work carried out to establish the potential increases in cycling, walking and wheeling, described above, helps us to assess this at a theoretical level. However, feedback from stakeholders (including public engagement) is critical to understanding whether the proposed improvements will be attractive to existing and potential users and achieve an increase in active travel in practice.

The responses to the stakeholder and public engagement described in chapter 5 were assessed using a 0-3 scale, in a similar way to the other elements of the prioritisation table (see 7.4 Completing the prioritisation table, below).

The stakeholders were categorised as:

- district and county councillors,
- parish councils,
- expert stakeholders and lobbying groups (including national groups such as Sustrans and the British Horse Society, and local specialist groups such as cycling advocacy groups), and
- general public.

Scores were assigned to each of the four categories of stakeholder, based on the number of responses relevant to the scheme and level of detail.

District and county councillors and expert stakeholders and lobbying groups were given a greater weighting, as these stakeholders are considered to speak on behalf of their district/county ward or have expert knowledge of the issues faced by people travelling by active modes. Parish councils were weighted lower than the district and county councillors, as they speak for a smaller population.

This meant that the maximum score available for individual stakeholder categories was 9. To avoid the risk that the stakeholder and public engagement score might unduly influence the overall scoring, the weighted scores were normalised to give a maximum of 3 in the district and county councillors and expert stakeholder and lobbying groups category, 2 in the parish councils category, and 1 in the general public category.

The weighted and normalised scores were then averaged, to give a single overall score for stakeholder and public engagement.

7.4 Completing the prioritisation table

For consistency, the same methodology and scoring system is being applied to all LCWIPs which are being prepared by Leicestershire County Council. This enables direct comparison between the proposed schemes across different areas when funding opportunities become available.

The route segments were given a score of 0 – 3 for each of the prioritisation criteria. Higher scores indicate where infrastructure improvements are likely to provide the greatest benefits. Individual route sections were scored separately, to account for the different interventions which were proposed on each part of the route. Schemes were prioritised based on their overall score:

- very high (scores greater than 16),
- high (13.1 – 16),
- medium (10 – 13), and
- low (scores less than 10).

None of the individual route segments scored highly on their own. Therefore, they were also prioritised as part of a corridor, to establish the benefits of delivering a complete and coherent route. For example, people are more likely to walk or cycle a route which is high quality along its whole length than a route which varies between high and low quality. Table 7.7, below, shows the order of priority of the overall corridors when the scores for all of the route segments which make up the corridors are combined and averaged.

Table 7.7 – Full corridor schemes in order of priority

Location	Corridor Segments	Effectiveness	Attractiveness	Policy	Economic	Deliverability	Total Score
Town Centre - Train Station	6A / 6B / 6C	3.7	1.3	6.1	5.0	2.0	**18.1**
A6004 (Ashby Road roundabout - Forest Road junction)	3	9.0	2.0	3.3	3.0	0.0	**17.3**

Table 7.7 – Full corridor schemes in order of priority cont'd

Location	Corridor Segments	Effectiveness	Attractiveness	Policy	Economic	Deliverability	Total Score
Train Station - University	6C / 6B / 6A / 8 / 7 / 1A / 1B / 1C / 1D	4.8	1.2	5.2	4.3	0.7	**16.2**
A6 (North West)	4A / 4B / 4C	6.3	2.7	2.4	2.7	2.0	**16.1**
A512	1A / 1B / 1C / 1D	5.5	1.8	4.9	3.8	0.0	**15.9**
A6 (South East)	4E / 4F / 4G	4.0	1.7	5.4	3.7	1.0	**15.7**
A6 (inc. Town Centre)	4A / 4B / 4C / 7 / 4E / 4F / 4G	5.1	1.9	4.0	3.3	1.3	**15.5**
Epinal Way	22 / 1C / 3 / 10	6.8	1.5	4.0	2.0	0.8	**15.0**
Baxter Gate (South of the A6)	8	5.0	0.0	4.5	5.0	0.0	**14.5**
A6004 (Forest Road roundabout)	10	5.0	1.0	3.3	2.0	3.0	**14.3**
A6004 (Alan Moss roundabout - Ashby Road roundabout)	22	7.0	1.0	3.8	0.0	0.0	**11.8**

Figure 7.3, below, shows the breakdown of the prioritisation scores for the individual corridor segments, highlighting the impact of the various criteria.

Figure 7.3 – Breakdown of the total prioritisation scores

(It should be noted that the results of the prioritisation process are a guide, and some flexibility may be required to account for external factors. For example, it may be necessary to tailor specific schemes to meet the criteria of external funding opportunities. In addition, proposals near to the County boundary may also need to be prioritised if they align with cycling and walking schemes being brought forward by neighbouring authorities).

7.5 Prioritised list of schemes

The full prioritisation table with scoring is included in appendix D.

7.5.1 Timescales

Once the schemes were prioritised, they were allocated timescales for delivery using the definitions set out in the LCWIP Technical Guidance:

- **short-term (typically implemented in <3 years)** – improvements which can be implemented quickly, or which are currently under development,
- **medium-term (typically implemented in <5 years)** – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or the need to resolve other issues such as further design work, securing planning permission, land acquisition etc, and
- **long-term (typically implemented in >5 years)** – more aspirational improvements or those where a solution has not yet been defined.

Timeframes for each corridor segment were applied based on a combination of priority, project deliverability, and indicative cost, as shown in table 7.8, below.

Table 7.8 – Scoring of prioritisation timescales

Priority	Conditions	Timescale
Very High	Scored 3 for criteria 12 (scheme feasibility) and is <£3,000,000	Short-term
	Scored 0 for criteria 12 and / or is >£3,000,000	Medium-term
High	Scored 3 for criteria 12 and is <£3,000,000	Short-term
	Scored 0 for criteria 12 and / or is >£3,000,000	Medium-term
Medium	Scored 3 for criteria 12 and is <£3,000,000	Medium-term
	Scored 0 for criteria 12 and / or is >£3,000,000	Long-term
Low	Scored 3 for criteria 12 and is <£3,000,000	Medium-term
	Scored 0 for criteria 12 and / or is >£3,000,000	Long-term

7.5.2 Indicative prioritisation of schemes

Table 7.9, below, shows the indicative prioritisation of the individual schemes, including where they rank on the prioritisation table, priority (low, medium, high, or very high, as described in section 7.4), indicative costs including maintenance, and timescales.

The wider areas schemes identified in the long list of schemes, such as cycle storage and bench seating, were not included in list of schemes to be considered for concept design stage, as these schemes do not require this level of highway design in order for their benefits to be assessed. However, they are included in the 10-year pipeline.

Table 7.9 – Indicative prioritised list of schemes and scheme cost estimates

Corridor Segment		Street(s)	Route Description	Length (km)	Prioritisation Score	Rank	Priority	Indicative Costs (including maintenance)	Timescales	Shortlist
1	A	Ashby Road	Priority raised table crossing and existing signalised Ashby Road / Greenclose Lane junction upgraded to a two-stage right turn arrangement.	0.33	14.1	15	Medium	£500,000	Long-term	Y
	B	Ashby Road	Mixed traffic cycling along the quiet 30mph section near Loughborough University. Priority raised table crossing and upgraded segregated crossing.	0.90	15.6	9	High	£960,000	Medium-term	Y
	C	Ashby Road roundabout	Ashby Road roundabout junction only. 'Hold the left' signalised roundabout with two-way segregated cycle track, parallel crossings.	0.24	16.6	7	High	£2,510,000	Medium-term	Y
	D	A512	Mixed traffic cycling along the quiet parallel road of New Ashby Road and a segregated cycleway westbound. Upgraded segregated crossings, priority side road crossings, bus stop with cycle bypass, bus shelters.	1.46	17.2	6	High	£2,800,000	Medium-term	Y

Table 7.9 – Indicative prioritised list of schemes and scheme cost estimates cont'd

Corridor Segment		Street(s)	Route Description	Length (km)	Prioritisation Score	Rank	Priority	Indicative Costs (including maintenance)	Timescales	Shortlist
3		A6004 Epinal Way	Ashby Road roundabout to Forest Road roundabout. Segregated cycleways, upgraded segregated crossings, priority raised table crossings.	0.76	17.3	5	High	£1,720,000	Medium-term	Y
4	A	Bishop Meadow roundabout	Bishop Meadow roundabout only. Segregated cycleway, low level vegetation and crossing upgrades.	0.18	15.1	12	Medium	£760,000	Medium-term	N
	B	A6 Derby Road	Bishop Meadow roundabout to Clifford Road. Segregated cycleways, upgraded segregated crossings, two-stage right turn junction arrangement, priority side road crossing and low-level vegetation.	0.72	17.6	3	High	£2,940,000	Medium-term	N
	C	A6 Derby Road	Segregated cycleways, upgraded segregated crossings, two-stage right turn junction arrangement, priority side road crossing and low-level vegetation.	0.89	15.6	9	High	£5,500,000	Medium-term	N
	E	High Street / A6 Leicester Road	Segregated cycleways, one-way arrangement for vehicles along High Street, two-stage right turn junction arrangement.	0.29	15.5	11	Medium	£1,890,000	Long-term	N
	F	A6 Leicester Road	Barrow Street to Shelthorpe Road. Segregated cycleways and priority raised table crossing.	0.78	21.1	1	Very High	£3,180,000	Medium-term	N
	G	A6 Leicester Road	Shelthorpe Road to Cedar Road. Segregated cycleway, two-stage right turn junction arrangement and segregated cycle and priority raised table crossings.	0.10	10.6	18	Low	£440,000	Medium-term	N

Table 7.9 – Indicative prioritised list of schemes and scheme cost estimates cont'd

Corridor Segment		Street(s)	Route Description	Length (km)	Prioritisation Score	Rank	Priority	Indicative Costs (including maintenance)	Timescales	Shortlist
6	A	The Coneries	Segregated cycleways and upgraded junctions to two-stage right turn arrangement.	0.16	16.3	8	High	£500,000	Medium-term	Y
	B	Nottingham Road	'Beacon Bingo' bus stop south of Cradock St to Nottingham Road canal bridge. Segregated cycleway and mixed traffic cycling, limiting on-street parking. Priority raised table crossing.	0.46	20.5	2	Very High	£940,000	Short-term	Y
	C	Nottingham Road	Nottingham Road Canal bridge to Loughborough railway station. Segregated cycleway and mixed traffic cycling. Upgraded segregated crossings.	0.25	17.4	4	High	£1,430,000	Short-term	Y
7		Swan Street	Derby Square to Baxter Gate two-way segregated cycleway, pocket park and vehicle restriction maintained.	0.21	13.2	16	Medium	£990,000	Long-term	Y
8		Baxter Gate	High Street to Jubilee Way segregated cycleways. Bus stop with cycle bypass.	0.18	14.5	13	Medium	£340,000	Long-term	Y
10		Forest Road roundabout	Forest Road roundabout junction only. Signalised roundabout with two-way segregated cycle track, parallel crossings and raised priority crossing with planted vegetation.	0.18	14.3	14	Medium	£2,770,000	Medium-term	Y
22		A6004 Epinal Way	Alan Moss Road roundabout to Ashby Road roundabout. Segregated cycleway, compact roundabout, and priority side road crossings.	1.00	11.8	17	Low	£6,180,000	Long-term	N
					Total Cost			**£36,350,000**		

7.6 Types of improvement scheme interventions / concept schemes

The concept drawings included below and in appendix E are shown for illustrative purposes only. They are intended purely to show how aspects of LTN1/20 could be applied along the corridors. They are not definitive schemes. The design of actual schemes will be subject to the amount of funding available, detailed design, public engagement, affordability of long-term maintenance etc.

7.6.1 Segregated cycleway

LTN 1/20 requires that "cyclists must be physically separated and protected" from motor vehicles. I.e., cycle lanes which are separated from motor traffic by only a white line are not acceptable under the guidance. Furthermore, it also requires that cyclists on urban streets are physically separated from, and do not share space, with pedestrians .

The document suggests a variety of ways in which cycle facilities can be segregated, including "full segregation" (a kerb between motor vehicles and the cycle lane) or "light segregation" such as installing wands or planters to separate cars from cyclists.

People who are new to or considering taking up cycling, or who do not feel confident cycling, tend to perceive cycle routes indicated only with road markings or cycle symbols to be unsafe for cycling, due to the lack of a physical barrier to remind drivers of the existence of the cycle lane or to protect cyclists from cars, vans, and HGVs.

Examples of where segregated cycleways have been included in LCWIP concept design ideas: New Ashby Road (corridor 1), Nottingham Road (corridor 6).

Figure 7.4 – Example of a cycle lane with light segregation using flexible wands

(Source: LTN 1/20 Cycle Infrastructure Design (page 12), Department for Transport (2020))

[23] LTN 1/20 Cycle Infrastructure Design (section 1.6 Summary Principles), Department for Transport, 2020.

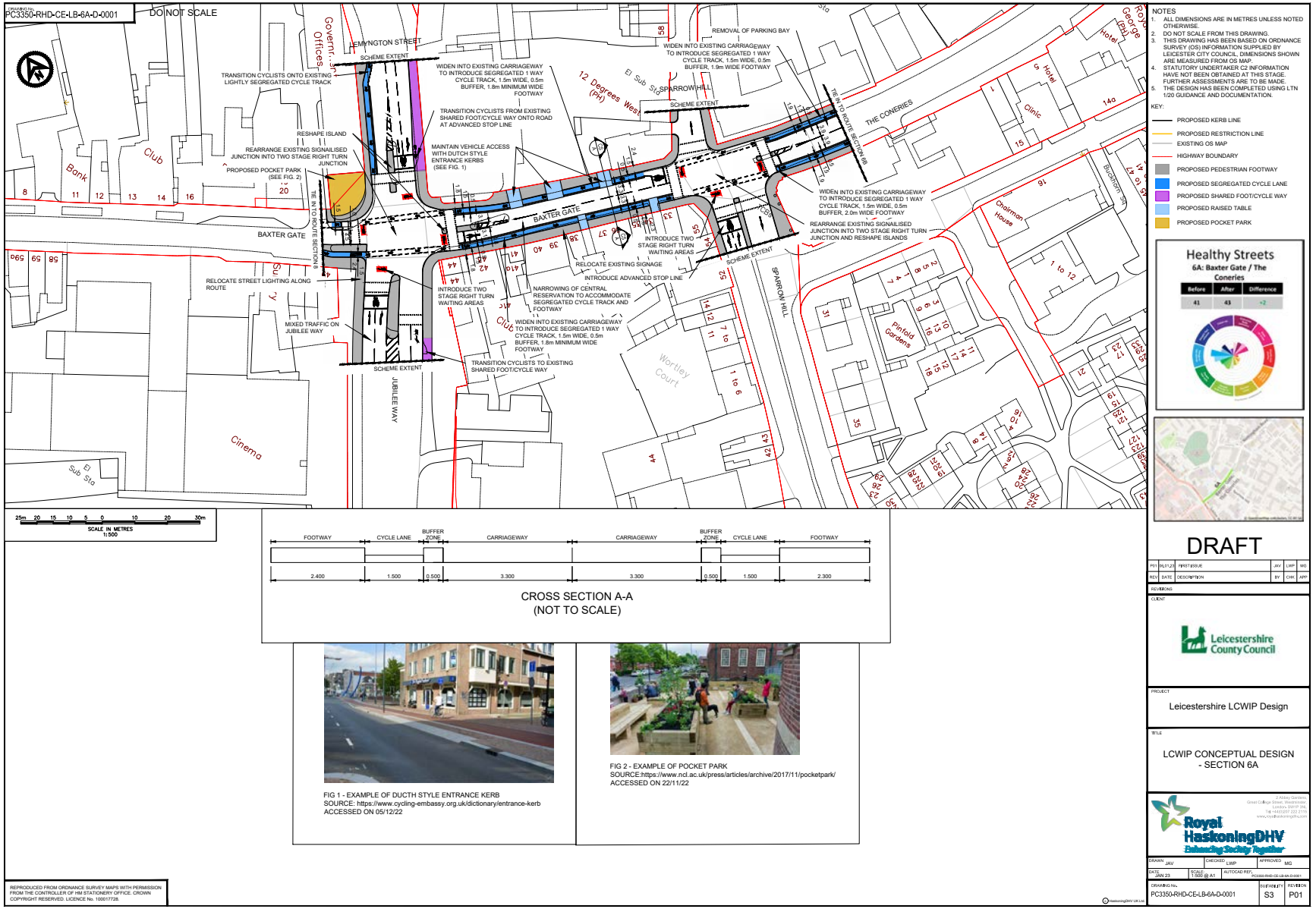


Figure 7.5 – Concept design for route section 6A (The Coneries)

7.6.2 Priority raised table crossing

Providing cyclists with priority at side road crossings enables them to cross side road junctions safely without losing momentum, supporting the core LTN 1/20 design outcomes of safety, directness, and comfort. Raised crossings reduce the need for them to brake to travel down and up dropped kerbs, as well as making travel easier for people using wheeled mobility aids or travelling with prams or pushchairs and encouraging motor traffic to slow on the approach to the crossing.

Examples where priority raised table crossings have been included in the concept designs: Nottingham Road (corridor 6), Forest Road Roundabout (corridor 10).

Figure 7.6 – Example of a raised crossing in Hackney

(Source: LTN 1/20)

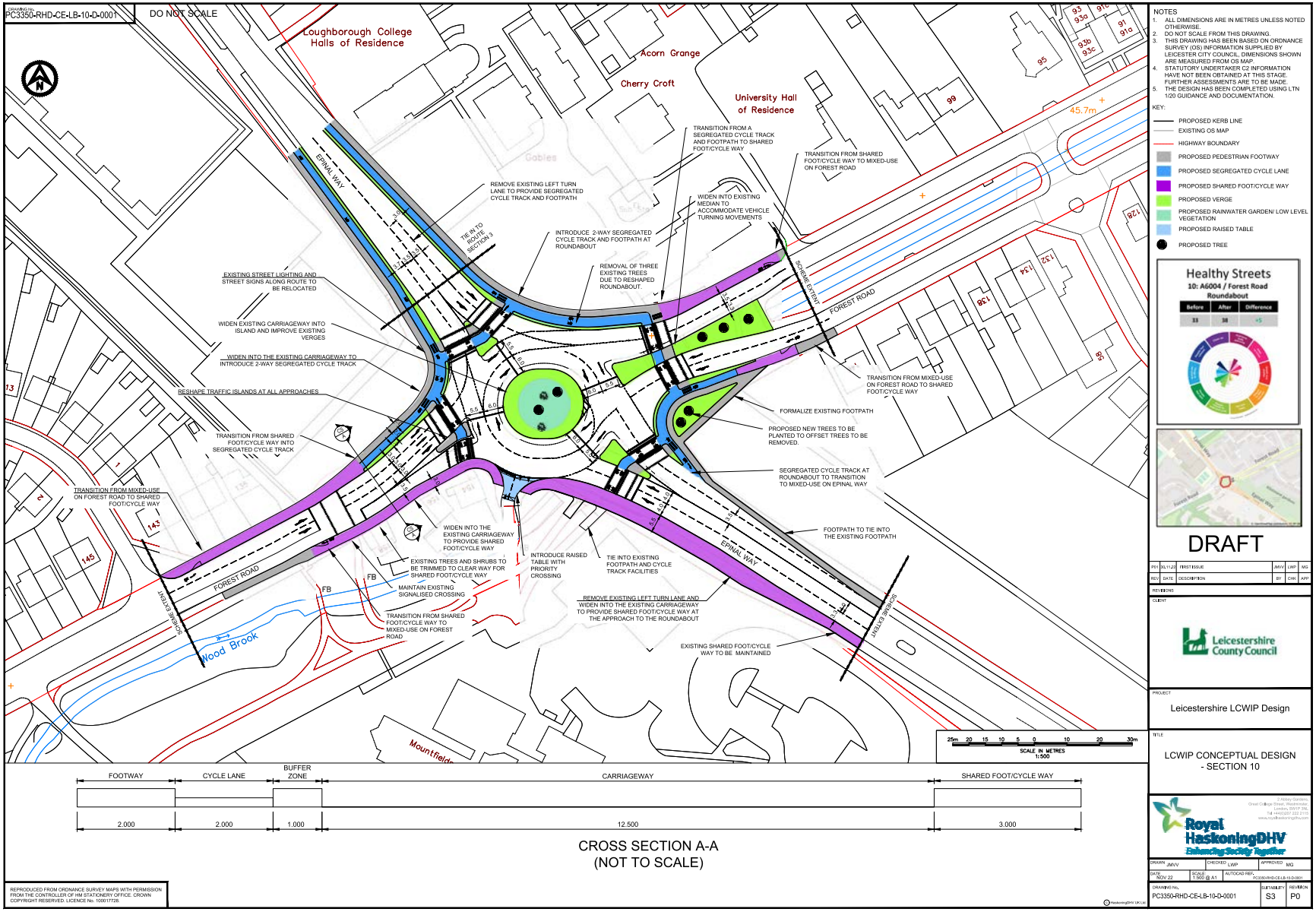


Figure 7.7 – Concept design for route section 10 (Forest Road roundabout)

7.6.3 Pocket parks

Pocket parks enable local residents, particularly those who do not have gardens at home, to enjoy the benefits of green areas such as experiencing nature and wildlife in an urban setting. As well as encouraging greater use of outdoor spaces as somewhere to socialise or relax, pocket parks also enable people to make longer journeys by cycling, walking, or wheeling by providing somewhere for them to break their journeys, sit, and rest.

Examples of where pocket parks have been included in LCWIP concept designs: Swan Street (corridor 7).

Figure 7.8 – Example of a pocket park in Fenham, Newcastle

(Source: Newcastle University; Photo credit: Daniel Mallo)

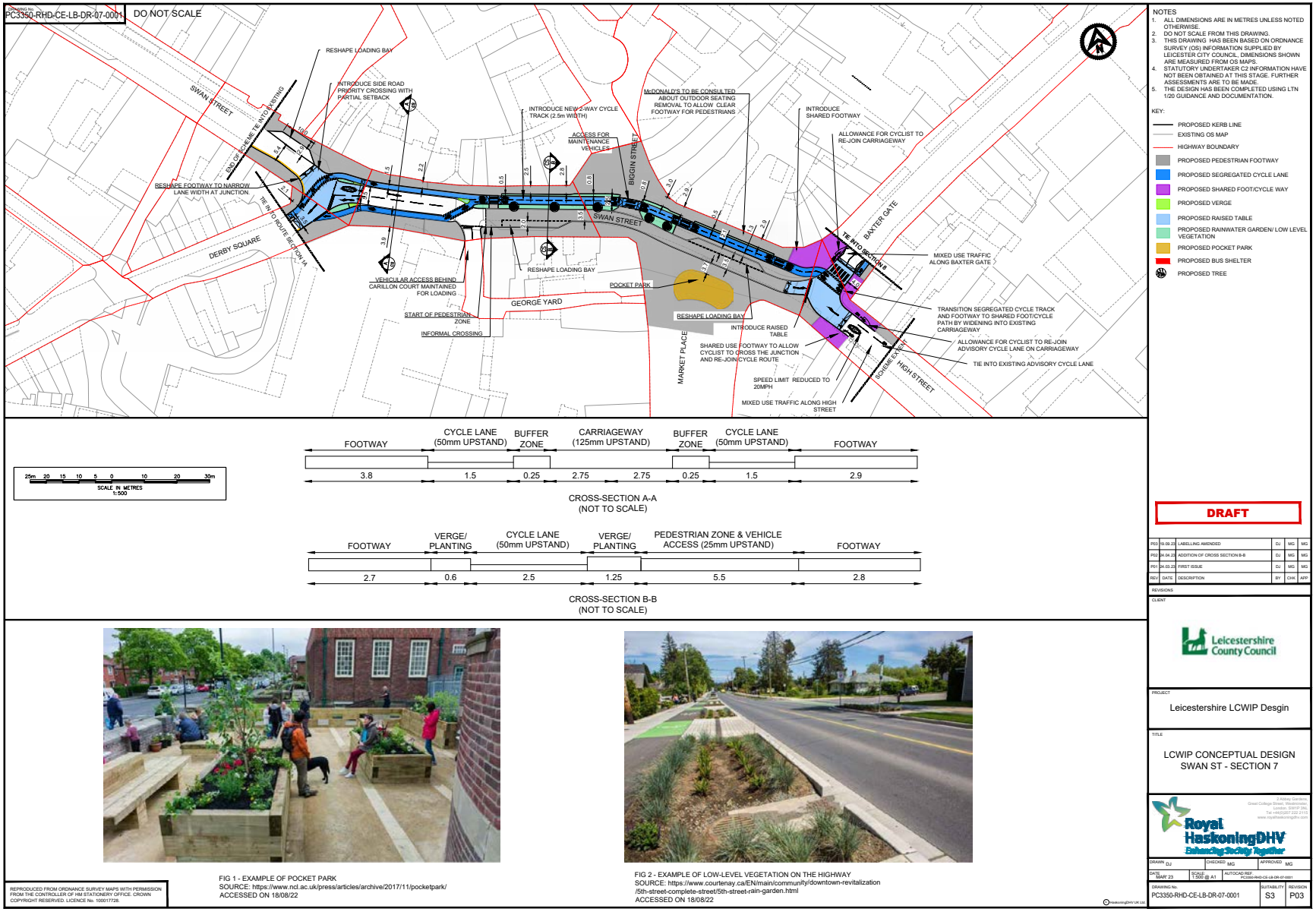


FIG 1 - EXAMPLE OF POCKET PARK
SOURCE: https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 18/08/22

FIG 2 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 18/08/22

Figure 7.9 – Concept design for route section 7 (Swan Street)

7.6.4 Floating bus stops

Floating bus stops involve a cycleway/track running between a bus stop passenger boarding area and the footway. Pedestrians cross the cycleway/track to reach the bus stop shelter and waiting area, or to reach the footway when they disembark from the bus.

These layouts reduce conflict between buses and cycle traffic. For example, by removing the need for buses to cut in front of cyclists to stop at bus stops or for cyclists to move into the main carriageway to go around buses which are stopped to set down or pick up passengers.

Examples of where floating bus stops have been included in LCWIP concept designs: New Ashby Road (corridor 1), Baxter Gate (corridor 8).

Figure 7.10 – Example of a floating bus stop in Leicester

(Source: Leicester City Council)

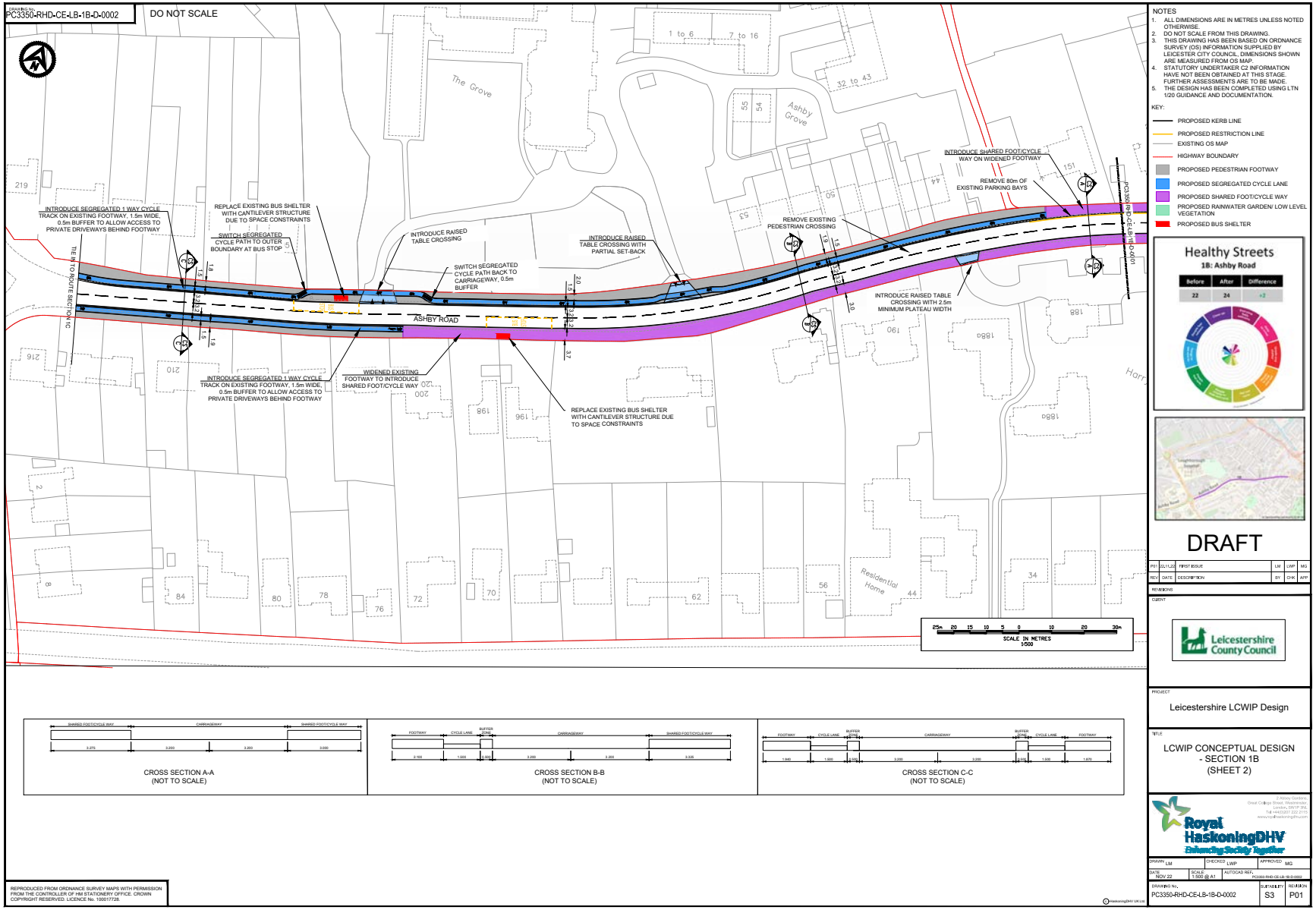


Figure 7.11 – Concept design for route section 1B (Ashby Road)

8. How we get from here to there

8.1 Funding

Government has been clear that it expects LCWIPs to form the basis of any bids for funding under the cycling and walking investment programme. Government funding will be administered primarily through Active Travel England. We will liaise with Active Travel England to maximise our ability to take advantage of funding opportunities, as they become available.

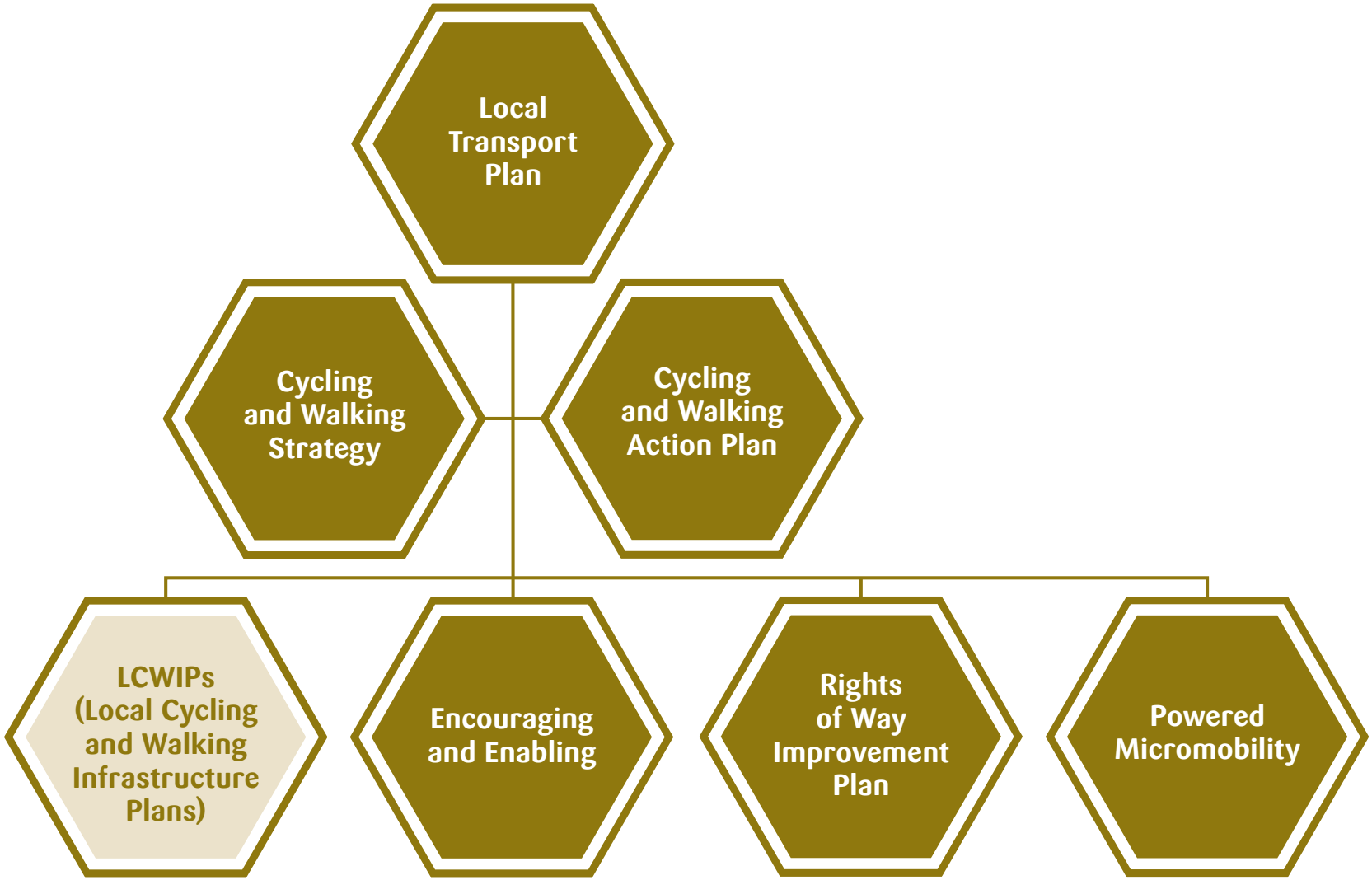
However, this does not mean that all LCWIP schemes will receive funding from Government, or that the cycling and walking investment programme will be the only available source of funding for LCWIP schemes. We will continuously work to identify potential Government and non-Government sources of funding to develop and deliver the LCWIPs.

Potential non-Government funding sources will include developer contributions, where cycling and walking improvements will help to mitigate the impacts of new developments.

Further work will be required to develop many of the LCWIP schemes. This will be carried out according to the prioritisation table in chapter 7. We anticipate that some of this development work will be funded from our existing budgets and incorporated into our annual programme.

8.2 Embedding and integration with policies, strategies, and plans

Figure 8.1 – How the LCWIP sits in relation to our other policies and strategies



It is standard practice for us to consider our existing transport policies when we are developing new ones, and LCWIPs will be no different. We will ensure that the latest version of each of our published and emerging LCWIPs are considered when we develop new transport policies. We will also take the published and emerging LCWIPs and their associated priority schemes into account when we renew and update our existing transport policies, including our Network Management Plan and Local Transport Plan.

8.2.1 Rights of Way Improvement Plan (RoWIP) and Public Rights of Way (PROW)

The LCWIP development process, as set out in Government guidance, has identified the priority cycling and walking network for improvement in our urban and suburban spaces, which includes some public rights of way (PROW). Whilst most of Leicestershire's population lives in urban and suburban areas, as a rural county, Leicestershire has a PROW network of over 3,000 kilometres which connects many village communities.

A key action in our CaWS is to have an up-to-date Rights of Way Improvement Plan (RoWIP). The RoWIP is the partnering document to our LCWIPs that helps connect our LCWIP cycling and walking networks in our urban and suburban spaces to the wider PROW network and rural settlements, encouraging and enabling greater use of Leicestershire's rural network.

8.3 Cross-boundary integration and working with other authorities

8.3.1 LCWIP integration

Each LCWIP will have its own priority list of schemes. It will be important to manage how the individual schemes are prioritised across Leicestershire, as the number of published LCWIPs increases. This will ensure that we deliver the most beneficial schemes, and that no individual area is prioritised over the rest of the County.

Our prioritisation will focus on:

- the criteria set out by Government for any funding opportunities administered by a government department such as the DfT, Active Travel England, or the Department for Levelling Up, Housing and Communities,
- planning applications for housing and employment development sites, and the potential for any developer funding or delivery of schemes, and
- the criteria associated with any other local funding opportunities, such as those which may be available through neighbouring planning and transport authorities.

As set out in section 2.2.2.2, some district councils may choose to develop their own LCWIPs in addition to ours. We will collaborate with them through our continued partnership working relationships to ensure coherent delivery of Leicestershire County Council-led and district-led LCWIPs, including where our priorities differ as well as where they coincide.

8.3.2 The planning process

We will work closely with district councils to deliver the LCWIP priority schemes. We anticipate that the majority of this collaboration will take place through the existing planning process.

When district councils are developing and updating their local plans, we will review their proposals to allocate sites for housing and employment against the priority schemes set out in the relevant LCWIP(s). If we identify that a site could be served by a route on the LCWIP network, we will engage with the district councils to ensure that the need for developer contributions is recorded in the Local Plan as appropriate.

We are also a statutory consultee for planning applications. We will consider all planning applications which we receive carefully, to identify whether they are likely to affect or be affected by an LCWIP priority scheme. Where appropriate, we will seek to apply planning obligations such as Section 106 contributions as a condition of planning permission.

8.4 Choose How You Move

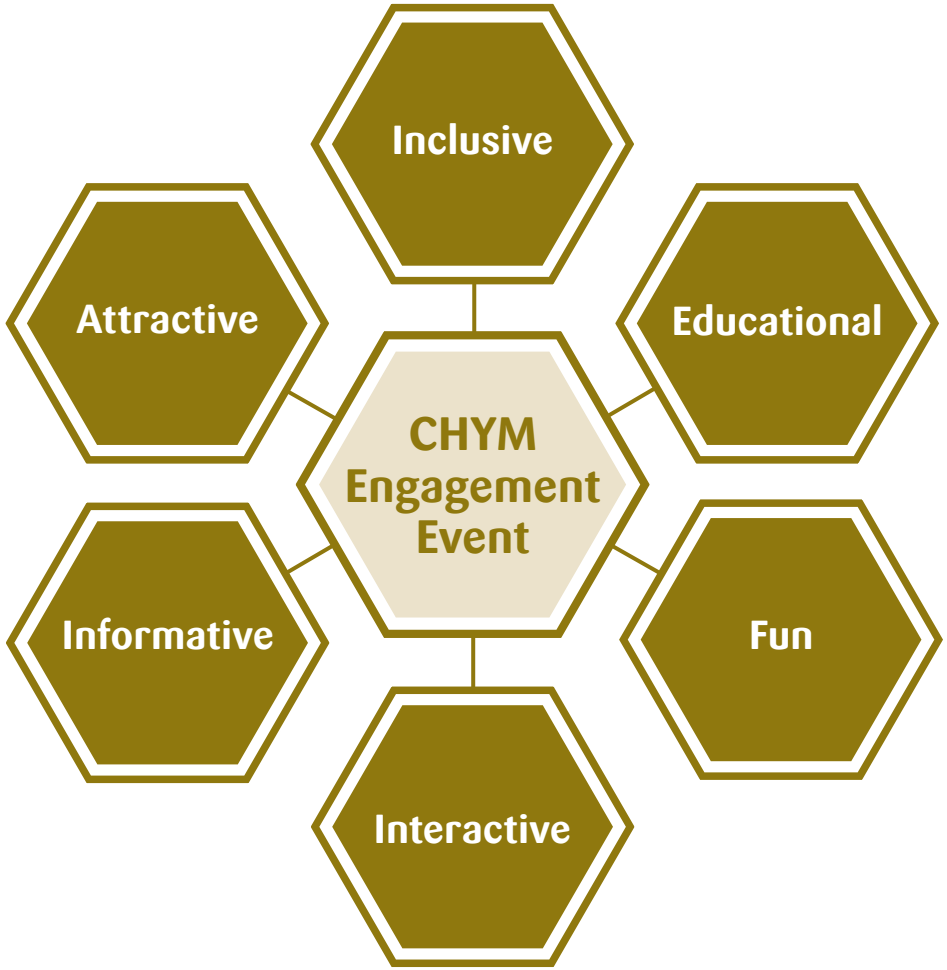
Our Choose How You Move (CHYM) is the brand for our programme of measures designed to encourage and enable people across Leicestershire to choose active and sustainable travel. The key aim is to create a culture shift in the county, taking a life-cycle approach that begins with children and includes all residents regardless of age or background, reducing single occupancy car use and for Leicestershire to become a county where cycling, walking and wheeling are safe, accessible, and obvious choices for short journeys, and a natural part of longer journeys.

Some of the great work we do, in collaboration with neighbouring local authorities, and the types of programme that will support usage of infrastructure delivered through LCWIPs includes:

- cycle training for all users,
- personalised travel planning for communities and businesses,
- helping Schools with their school travel plans to support staff, parents and children,
- active travel grants – helping businesses empower their employees to use active travel,
- E-bike trails, and
- incentivised activity monitoring with Better Points rewards.

8.4.1 Community engagement

A key part of helping people traveling actively is community engagement. The CHYM team delivers a broad programme of active and sustainable travel events engaging community groups, families and local residents to help them integrate active travel in their daily lives. All our engagement events aim to be:



8.4.2 Cycling, walking and wheeling – Leicestershire's Active Travel Forum

Another way we engage with communities, local advocacy groups and other stakeholders involved in active travel in Leicestershire, is our Active Travel Forum. This forum meets every 6 months with a varied agenda to continually update attendees on the great work we are doing, and ensure everyone has a voice to help improve our work that helps all our communities travel actively for life.

8.4.3 Business Engagement programmes

Our CHYM Business Engagement programmes focuses on reducing reliance on single car occupancy commuting. Some of the ways we achieve this are:

8.4.3.1 Business grants scheme

Business grants of around £2,500 are available to employers across Leicestershire who wish to implement or enhance a specific cycling and/or walking and wheeling scheme, and are committed to helping their employee travel actively.

Since 2011 over £270,000 has been awarded in grants for a range of measures including: cycle parking, active travel lockers and storage equipment, showers, information stands, travel clinics, e-bike fleets, cycle training, electric vehicle charging, and cycle repair stands.

8.4.3.2 BetterPoints and the Choose How You Move Rewards Challenge

BetterPoints is a mobile app that combines tracking, motion sensing and user interaction to help track, record, and reward people for active travel activities.

The BetterPoints Choose How You Move Rewards Challenge is a joint initiative between Leicestershire County Council and Leicester City Council. The challenge aims to encourage modal shift from private/single occupancy car journeys to more sustainable forms of travel including walking and cycling, public transport, and car sharing. People using the BetterPoints app are rewarded with points when they travel within Leicestershire by active and sustainable modes. These points can be redeemed for high street vouchers or donated to charity.

The CHYM team engages with businesses to encourage employers to take up the challenge and promote it to their employees.

Previous promotions during a four-month period that boosted rewards for regular car drivers who switched to more sustainable modes, with the aim of reducing shorter car journeys, achieved 56% of regular car users who had signed up to the app saying that the promotion encouraged them to use their car less.

We also encourage workplaces to get competitive in friendly competition with similarly sized organisations in programmes like the 'Let's Go Workplace Challenge'. In our past challenges over 80 workplaces and 1,250 users engaged with the challenge to see which organisation could encourage the most people to travel sustainably. During the challenge more than 73,000 walking, cycling, and bus journeys were recorded and almost 500 new users signed up to the app.

Between January and December 2021, the BetterPoints 'Choose How You Move Rewards Challenge', achieved:

- 616,788 active journeys,
- potential reduction of 228 tonnes CO2, compared to if all journeys recorded in the app were made by private car,
- 689,443 miles travelled actively (e.g., walk, cycle, run),
- 37% of survey respondents reduced their car usage from baseline,
- 52% (4,669) of a sample of 8,970 sustainable journeys assessed were confirmed to have replaced a car journey, and
- 1,140 new users registered.

8.4.3.3 E-bikes and bike share

We run electric bike (e-bike) and bike share initiatives, including in partnership with Leicester City Council, with the objectives of:

- supporting the local economy by supporting access to new and existing employment, education, and training,
- actively promote increased levels of physical activity through walking and cycling,
- provide clear solutions to the problems of poor air quality and carbon emissions,
- reduce traffic congestion by providing people with travel choices,
- increase awareness of e-bikes for wider groups, including people from communities who don't regularly cycle such as older people, people with disabilities or health problems, women, people on lower incomes, and some ethnic minority groups,
- support mode shift from private vehicles, and
- provide the opportunity to explore outcomes and impacts to inform development of the national e-bike support programme.

We have a strong track record of securing Government funding to help run our e-bike and bike share initiatives, helping continue to reduce single occupancy car use.

8.4.4 Schools programme

8.4.4.1 School Streets

We have a successful programme of School Streets, supporting schools, residents, parents, and children. School Streets is an initiative that covers roads outside schools which have a temporary restriction on motorised school and through traffic at school drop-off and pick-up times. The aim is to create safer, healthier, and more pleasant environments for children, their parents, residents, and people travelling.

School Streets involve the schools and local communities to help run the scheme, enabling them to get involved in improving their own local communities and helping instil active travel as the first choice for travel in children and wider community.

Participating schools and localities go through a robust set of assessments to ensure potential School Streets schemes are safe and appropriate. We consider:

- **road classification -** i.e., is it a main A road, or local residential unclassified road,
- **weight restrictions -** to ensure any HGVs can be re-routed during the street closure times,
- **type of street -** i.e., cul-de-sac or through route,
- **deliverability -** ensuring any constraints are assessed to maximise success,
- **park and stride options -** proximity of public parking in wider community,
- **trip attractors in addition to the school -** such as shops and local services,
- **number of affected households -** ensuring local residents benefit from the schemes, and
- **school and local community support -** ensuring the schemes have the best chance to succeed.

All School Streets trials are monitored and evaluated, to ensure the final ongoing scheme meets the needs of local communities, participating schools and the overall School Street aims.

8.4.4.2 Modeshift STARS

Modeshift STARS is an established Sustainable Travel Accreditation programme for primary schools across the UK. This is a national awards scheme to recognise schools demonstrating excellence in supporting cycling, walking and other forms of sustainable travel. Bronze, silver, or gold star accreditation are awarded to participating schools who implement sustainable travel initiatives that result in modal shift away from the car for school journeys.

8.4.4.3 Bikeability

Bikeability training is offered across the County, to help children gain practical cycling skills and learn how to cycle safely on Leicestershire's roads. Subject to continued Government funding support, we aim to train thousands more children to Level 1 or 2[24] standard. Our focus is on Year 6 primary school pupils, with an annual target to reach just over a third of all Year 6 pupils in Leicestershire.

[24] Level 1 involves learning in a traffic-free environment, while Level 2 takes place on quiet roads to introduce children to cycling with traffic.

8.5 Future engagement

Engagement is a key part of ensuring the LCWIP continues to meet the needs of our communities in the area, encouraging and enabling them to travel actively.

Building on engagement set out in section 5.2, we began our commitment to ongoing engagement with an online consultation on the final draft version of this LCWIP, prior to publication. This consultation sought feedback in four areas:

- how residents and stakeholders feel about the concept of LCWIPs,
- views on the priority networks,
- views on the 10-year pipeline of schemes, and
- view on the general content and presentation of the LCWIP.

151 comments were received, including 7 responses by email/letter.
The response was mainly positive. However, many people stated that this full LCWIP report is too long to be digested easily. We have created Executive Summaries to accompany the full report, for easier reading.

This published version of the report incorporates appropriate changes following consideration of those which were suggested in responses to the consultation. We also received comments on the LCWIP development process, which we shall consider in the development of future LCWIPs.

Comments on the priority networks and schemes have been recorded and will be considered at appropriate stage as we develop the concept scheme designs and when we review the LCWIP. We will continue to proactively engage with district councils, residents, and other stakeholders as we develop and deliver the LCWIP schemes.

We also received comments requesting wider measures which are outside the scope of the LCWIP, such as enforcement, education, and maintenance of existing walking and cycling infrastructure. These have been passed to the appropriate teams within Leicestershire County Council to inform existing and future work.

We will carry out further public engagement when we review this LCWIP at 3, 5, and 10 years after publication. This will be in a more limited form than the extensive public consultation and engagement which was carried out to inform the development of the initial LCWIP, the priority cycling and walking network, and the improvement schemes and their prioritisation. It will mainly focus on updating the table of priority schemes, following any changes in the local area between publication of the LCWIP and its review. For example, schemes which have been delivered will be removed from the table and, if appropriate, replaced with new ones.

9. Monitoring and evaluation

Effective and robust monitoring and evaluation of our LCWIPs, and the data that informs their ongoing development and delivery, is key to understanding how people are travelling in our communities and how this changes over time, be it throughout the day, week, month, or year, and how to support the move to active travel. Better understanding of travel patterns and how people choose to travel at a local level will help ensure that the LCWIP improvement schemes will provide the right facilities to encourage and enable people to travel actively.

9.1 Data gathering

To build this better understanding of local travel habits we are installing a network of multi-modal counters. These counters use artificial intelligence to anonymously count how people travel - whether it's by cycling, walking, or by other modes, such as by car or bus. Investing in this type of technology now will help build an expanding knowledge base, which provides a picture of local travel and how best we can facilitate more active travel in our communities. This data will give a baseline from which we can assess the impact of LCWIP future schemes and monitor progress towards our CaWS targets.

The emerging data from the camera counters indicates that the majority of current cycling and walking journeys are associated with travel to education or leisure travel. This suggests that there may be significant scope to increase the number of people cycling, walking and wheeling to work.

Cycling, walking and wheeling as a percentage of all travel between August 2022 and May 2023 ranged from 1% on parts of Ashby Road, Nanpantan Road, and A6 Derby Road to 74% at Coe Ave. The average across all sites in the Loughborough LCWIP area was 8.7%. Ashby Road roundabout, the A6 Derby Road north of the town centre and Epinal Way north of Forest Road roundabout experienced the highest volume of cycling, walking and wheeling traffic, with medians of between 2,700 and 4,200 daily active travel journeys across the analysis period. All of these routes experienced peaks during the autumn University term, with Ashby Road Roundabout seeing 5,000-6,500 daily cycling, walking and wheeling journeys between October and Christmas 2022 and continued high usage during the 2023 semester.

The route from the town centre to the Loughborough railway station also experienced higher than average levels of active travel, with a median of 2,051 daily cycling, walking and wheeling journeys. The number of daily journeys was fairly stable through summer, dropping to lows of 1,200 around Christmas. All routes experienced increasing usage from January to May 2023.

The presence of the University means that travel to education makes up a large proportion of active travel journeys, as demonstrated by the higher volumes of travel during term-time. These routes also appear to be used for commuting by cycling, walking and wheeling. However, the majority of journeys on routes with lower numbers of cyclists and pedestrians appear to be travel for leisure.

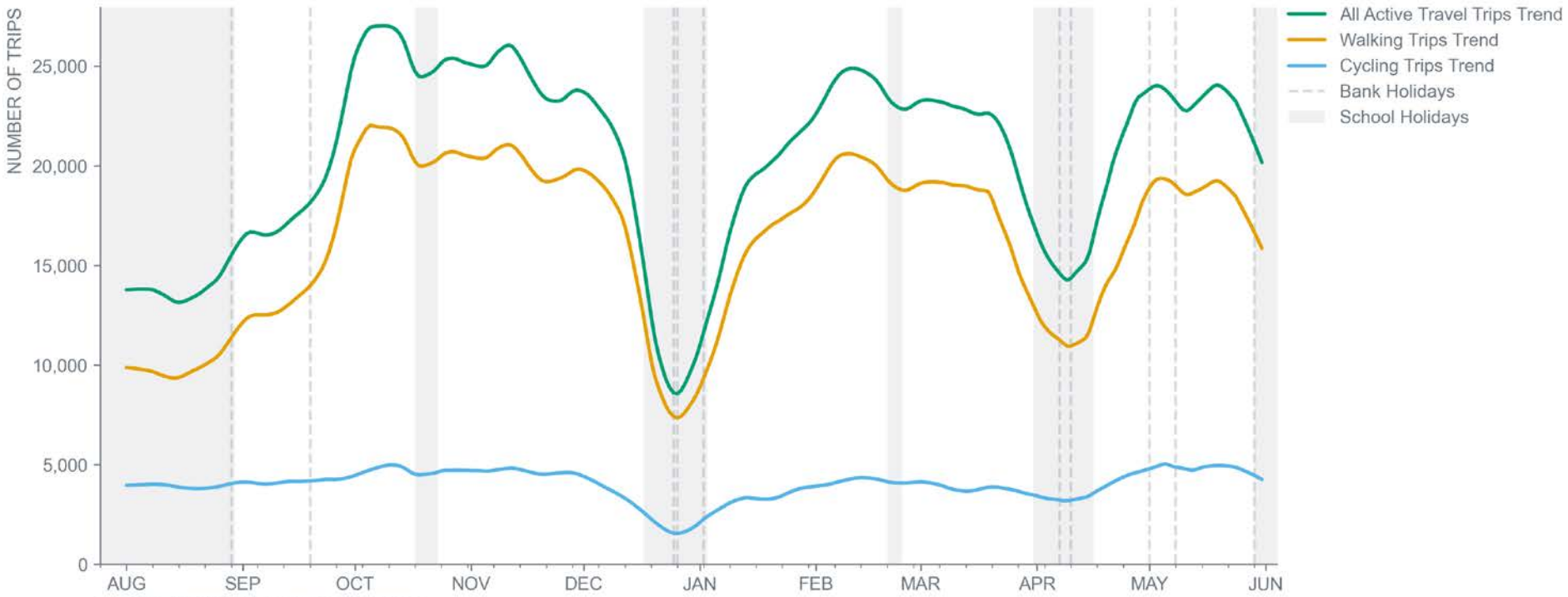
Table 9.1 – How people travel in the Loughborough LCWIP area and the wider County

Transport modal data for period Aug 2022 – May 2023														
	Pedestrian		Cyclist		Motorbike		Car		LGV		HGV		Bus	
	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count
All sites	4.32	7,763,839	1.12	2,005,522	0.47	836,396	82.6	148,397,952	9.21	16,547,702	1.57	2,814,762	0.72	1,301,511
Loughborough LCWIP area	6.1	4,923,482	1.47	1,189,212	0.47	377,279	80.84	65,334,419	8.57	6,915,385	1.63	1,312,014	0.83	669,576
Education	5.91	5,014,205	1.34	1,132,792	0.49	414,731	80.97	68,654,758	9.07	7,694,248	1.45	1,231,146	0.77	648,966
Employment	3.19	2,304,089	1.15	832,753	0.48	343,618	82.42	59,519,770	10.01	7,230,852	2.01	1,454,092	0.74	533,797

The above table 9.1 gives an early indication of how people are travelling in the LCWIP area and county wide. The table shows the overall percentages of all journeys counted, for each mode; walking/wheeling (pedestrians), cycling, car, bus and goods vehicles.

Based on this emerging data we can begin to see current trends for active travel in the LCWIP area, and in the wider county. The indicative daily active travel trends are shown below in figure 9.1.

Figure 9.1 – Showing indicative active travel trends in the Loughborough LCWIP area



It important to note that this is early data and analysis, and as we collect more data and determine the best way to analysis and set baselines to measure improvement from, we will be able to ensure this empirical data is put to best use for the benefit of our communities.

9.2 Active travel scheme delivery monitoring and evaluation

As the active travel improvement schemes identified in this LCWIP are delivered, we will undertake specific monitoring and evaluation at a scheme delivery level to monitor the before and after impacts of a scheme. This will help to determine the benefits and value for money in having the scheme in place. The results of these monitoring and evaluation approaches will be invaluable in helping inform the review of LCWIPs at 3, 5, and 10 years after publication, and enable LCWIPs to continue to be important documents that help guide delivery of the right active travel schemes in the right places, encouraging and enabling our communities to travel actively for life.

10. Appendix A – LCWIP technical guidance core design principles

Coherent

The network must be coherent; it must link all the places cyclists want to start and finish their journeys with a route quality that is consistent and easy to navigate. Abrupt changes in the level of provision for cyclists will mean that an otherwise serviceable route becomes disjointed and unusable by the majority of potential users.

Attractive

Cyclists are more aware of the environment they are moving through than people in cars or other motor vehicles. Cycling is a pleasurable activity, in part because it involves such close contact with the surroundings. The attractiveness of the route itself will therefore affect whether users choose to cycle.

Safe

Cycle networks must not only improve cyclists' safety, but also their feeling of how safe the environment is. Consideration must be given to reducing the speeds of motor vehicles to acceptable levels, particularly when cyclists are expected to share the carriageway. The need for cyclists to come into close proximity and conflict with motor traffic must be removed, particularly at junctions, where the majority of crashes occur.

Comfortable

Smooth surfaces, with minimal stopping and starting, without the need to ascend or descend steep gradients and which present few conflicts with other users creates comfortable conditions that are more conducive to cycling. The presence of high speed, high volume motor traffic affects both the safety and the comfort of the user.

Direct

Routes for cyclists must provide direct and fast routes from origin to destination. In order to make cycling preferable to driving, routes for cyclists must be at least as direct - and preferably more direct - than that available for private motor vehicles.

An indirect route for cyclists may result in some of them choosing the more direct, faster route, even if it is unsuitable for cycling.

LCWIP Technical Guidance (Figure 8, page 24), Department for Transport, 2017

11. Appendix B – AMAT user interface inputs

Inputs	Method
General:	
Intervention name	Scheme name
Intervention promoter	Leicestershire County Council
Appraisal year	2022
Intervention opening year	The opening year is assumed to be 2026 for all schemes
Last year of funding	2043 or 2063 depending on the appraisal period
Appraisal period	20 years and 40 years appraised for each scheme
Local area type	Determined using the AMAT spreadsheet 'Area Lookup' sheet
Cycling:	
Number of trips without the proposed intervention	Cycling flows from the Propensity to Cycle Tool (PCT) Census 2011 commuting Route Network (LSOA) dataset, uplifted to account for all trip purposes and return journeys.
Number of trips with the proposed intervention	Central cycling potential estimates from Active Travel England's (ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip which used the scheme infrastructure	Calculated by dividing the length of the scheme by the length of an average cycling trip (as stated in the AMAT spreadsheet).

Inputs	Method
Cycling cont'd:	
Current cycling infrastructure for this route	Selected the type of infrastructure currently in place along the route from the dropdown. Where there are more than one infrastructure type present along a route, the type was assigned based on which covers more of the route.
Proposed new cycling infrastructure for this route	Selected the type of infrastructure being proposed from the dropdown. Where more than one infrastructure type was being proposed (for >25% of the total scheme length) separate AMATs were completed for each infrastructure type.
Are any additional shower facilities being added?	Shower facilities are not being proposed for any of the schemes.
Are any additional secure storage facilities being added?	Secure storage facilities are not being proposed for any of the schemes.
Walking:	
Number of trips without the proposed intervention	Census 2011 data on commuters by Lower Super Output Area from the DataShine Tool, uplifted to account for all trip purposes and return journeys. Proportion of total network as compared to proposed network was applied to the walking trips by LSOA in 2011.
Number of trips with the proposed intervention	Central walking potential estimates from Active Travel England's (ATE) Active Travel Uplifts Tool and Cost Benchmarks spreadsheet.
The average proportion of a trip which used the scheme infrastructure	Calculated by dividing the length of the scheme by the length of an average walking trip (as stated in the AMAT spreadsheet).
Current walking infrastructure for this route	Selected the type of infrastructure currently in place along the route from the options listed.
Proposed new walking infrastructure for this route	Selected the type of infrastructure being proposed from the options listed.

12. Appendix C – Proposed cycling and walking routes

			20-Year Appraisal			40-Year Appraisal		
Corridor No.	**Corridor Segment**	**Brief Description of Scheme**	**PCT 2011 Census**	**Govt. Target Scenario**	**Go Dutch Scenario**	**PCT 2011 Census**	**Govt. Target Scenario**	**Go Dutch Scenario**
1	1A	This scheme goes west from the town centre and connects to Loughborough University. This section stops at west of Ashby Rd / Greenclose Ln junction.	1.62	2.88	13.16	3.03	5.39	24.72
	1B	This scheme goes west from the town centre and connects to Loughborough University. This section ends on the east of Ashby Rd / A6004 roundabout.	1.82	7.13	35.07	3.40	13.40	66.55
	1C	This scheme aims to upgrade the existing large signalised roundabout at Ashby Rd /A6004 intersection to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm. This section ends on the west of Ashby Rd / A6004 roundabout.	1.12	2.84	12.52	2.11	5.37	23.75
	1D	This scheme aims to complete the connection westwards from the town centre to the Loughborough University. This section ends on the east of Ashby Rd / Holywell Way roundabout	1.52	2.17	8.08	2.85	4.09	15.32
3	3	This scheme provides connection south of Ashby Roundabout to the other major East-west corridor, utilising the existing wide footway space. Improving access to Loughborough College.	1.30	4.34	18.57	2.47	8.28	35.55

Corridor No.	Corridor Segment	Brief Description of Scheme	20-Year Appraisal			40-Year Appraisal		
			PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario
4 (NW)	4A	This scheme aims to upgrade the existing large signalised roundabout at Bishop Meadow to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm.	1.50	2.68	11.47	2.81	5.02	21.54
	4B	This corridor aims to provide a connection from the Bishop Meadow roundabout in the west towards Loughborough town centre. This section stops at Clifford Rd.	1.48	4.24	17.45	2.77	7.97	33.06
	4C	This scheme aims to provide connection from the Bishop Meadow roundabout in the west towards Loughborough town centre. This section stops at right at Swan Street.	0.66	1.65	6.74	1.22	3.11	12.76
4 (SE)	4E	This scheme aims to connect the south-eastern region with the town centre. The majority of High St is one-way and does not allow motor vehicles only for access. This section is just the Southfield Rd / Leicester Rd Junction.	1.30	0.54	1.04	2.47	1.01	1.96
	4F	This scheme aims to connect the south-eastern region with the town centre. This section stops at right after Southfield Rd / Leicester Rd Junction.	1.19	1.96	7.58	2.23	3.68	14.32
	4G	This scheme aims to provide a new signalised junction arrangement for cyclists and pedestrians, continue south and ends at Cedar Rd before the A6 becomes 40mph. This section ends at the Cedar Rd / A6 Leicester Rd Junction.	1.69	7.08	35.00	3.14	13.23	65.97

Corridor No.	Corridor Segment	Brief Description of Scheme	20-Year Appraisal			40-Year Appraisal		
			PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario	PCT 2011 Census	Govt. Target Scenario	Go Dutch Scenario
6	6A	This scheme aims to connect the Loughborough train station with the town centre. This section ends at west of Sparrow Hill Junction.	1.34	11.58	53.02	2.50	21.93	101.78
	6B	This scheme aims to connect the Loughborough train station with the town centre. This section ends at east of the canal.	1.74	3.28	13.55	3.26	6.19	25.66
	6C	This scheme aims to connect the Loughborough train station with the town centre. This section ends at the Loughborough train station.	1.36	1.15	5.57	2.55	2.15	10.42
7	7	This scheme goes through Loughborough town centre high street which is non-motorised and currently a pedestrian zone and only allows cyclists and loading between the hours of 4 pm and 10 am. This route would link routes 1A, 4C, 4E and 8 together. The route has a market which will need to be addressed and operates Thursdays and Saturdays. This section is the Loughborough Town Centre Pedestrianised Area. This section stops right after High St / Baxter Gate Junction.	1.50	1.59	5.78	2.81	2.97	10.83
8	8	This scheme aims to connect the Loughborough train station with the town centre. This section ends at west of Lemyngton St Junction.	1.64	1.45	4.66	3.09	2.74	8.82
10	10	This scheme aims to upgrade the existing large signalised roundabout at Forest Rd/ A6004 to a LTN1-20 style signalised roundabout with cycle tracks on the peripheral and crossing on each arm.	1.07	2.91	12.20	2.00	5.47	23.00
22	22	This scheme provides connection north of Ashby Roundabout, utilising the existing wide footway space.	0.26	0.78	3.54	0.49	1.47	6.72

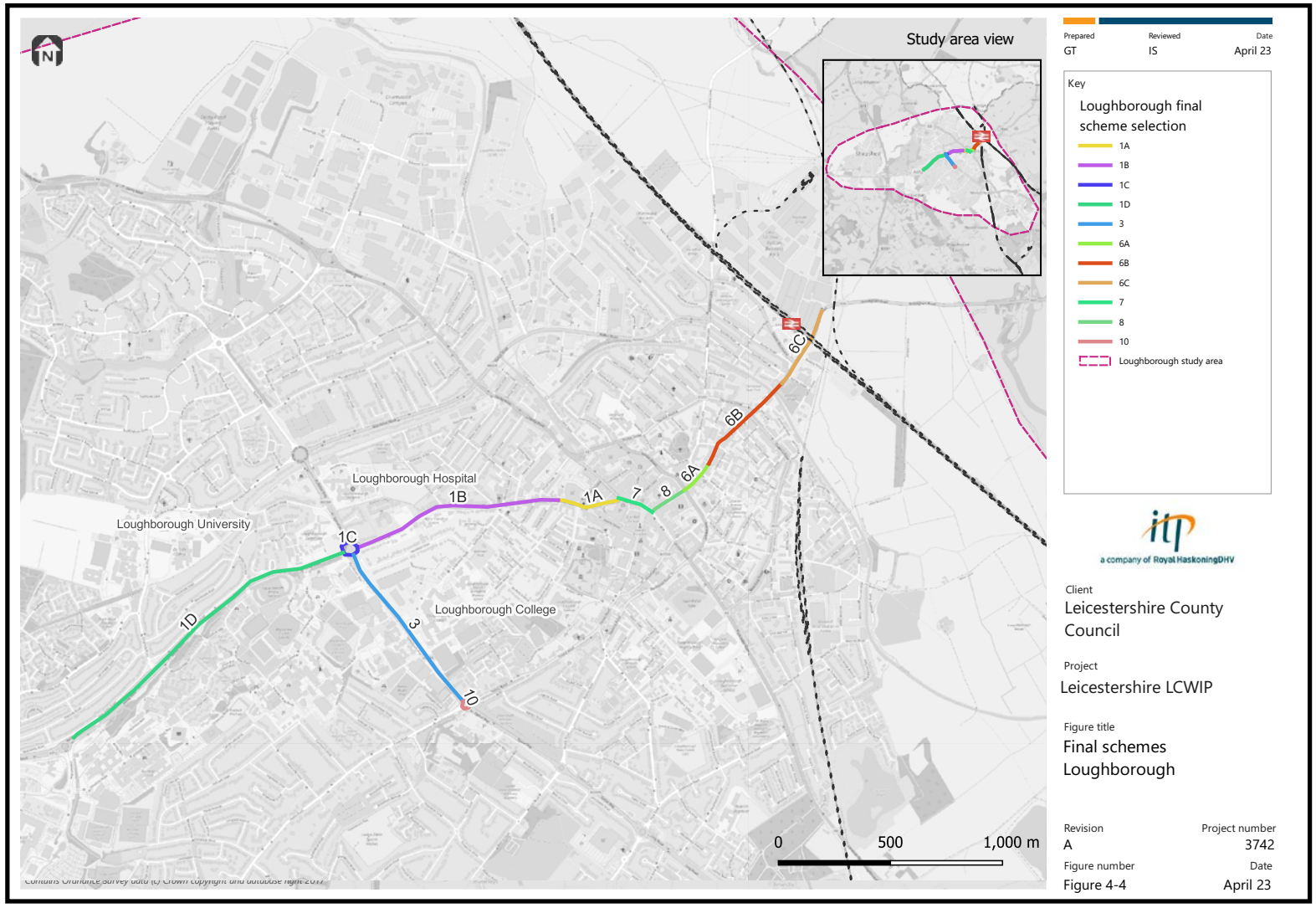
13. Appendix D – Loughborough area LCWIP prioritisation table

	Effectiveness				Attractiveness	Policy							Economic		Deliverability	Prioritisation	
Scheme	1a. Potential to encourage new walking trips	1b. Potential to encourage new cycling trips	2. Population who directly benefit from the intervention	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -proximity to an AQMA area	5b. Improvement in air quality - PBCC car emissions	5. Air Quality (5a and 5b Average)	6. Links to / through an area of deprivation	7. Proximity to schools / education	8. Priority / importance of the intervention as defined through the engagement process	9. Improved multimodal transport connections	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total Score	Rank
1A	2	0	1	2	1	3	0	1.5	1	1	0.6	0	3	1	0	14.1	15
1B	2	0	2	1	2	3	0	1.5	1	3	0.1	0	3	0	0	15.6	9
1C	2	3	0	1	2	3	0	1.5	2	2	0.1	0	3	0	0	16.6	7
1D	2	0	3	1	2	0	0	0	2	2	0.2	0	3	2	0	17.2	6
3	3	2	1	3	2	0	0	0	0	3	0.3	0	3	0	0	17.3	5
4A	2	2	0	1	3	0	0	0	1	0	0.1	0	3	0	3	15.1	12
4B	2	1	1	2	3	3	0	1.5	1	0	0.1	0	3	0	3	17.6	3
4C	2	1	2	3	2	3	0	1.5	1	1	0.1	0	1	1	0	15.6	9
4E	2	0	1	2	1	3	0	1.5	2	1	1	0	3	1	0	15.5	11
4F	2	1	2	2	2	3	0	1.5	3	3	0.6	0	3	1	0	21.1	1

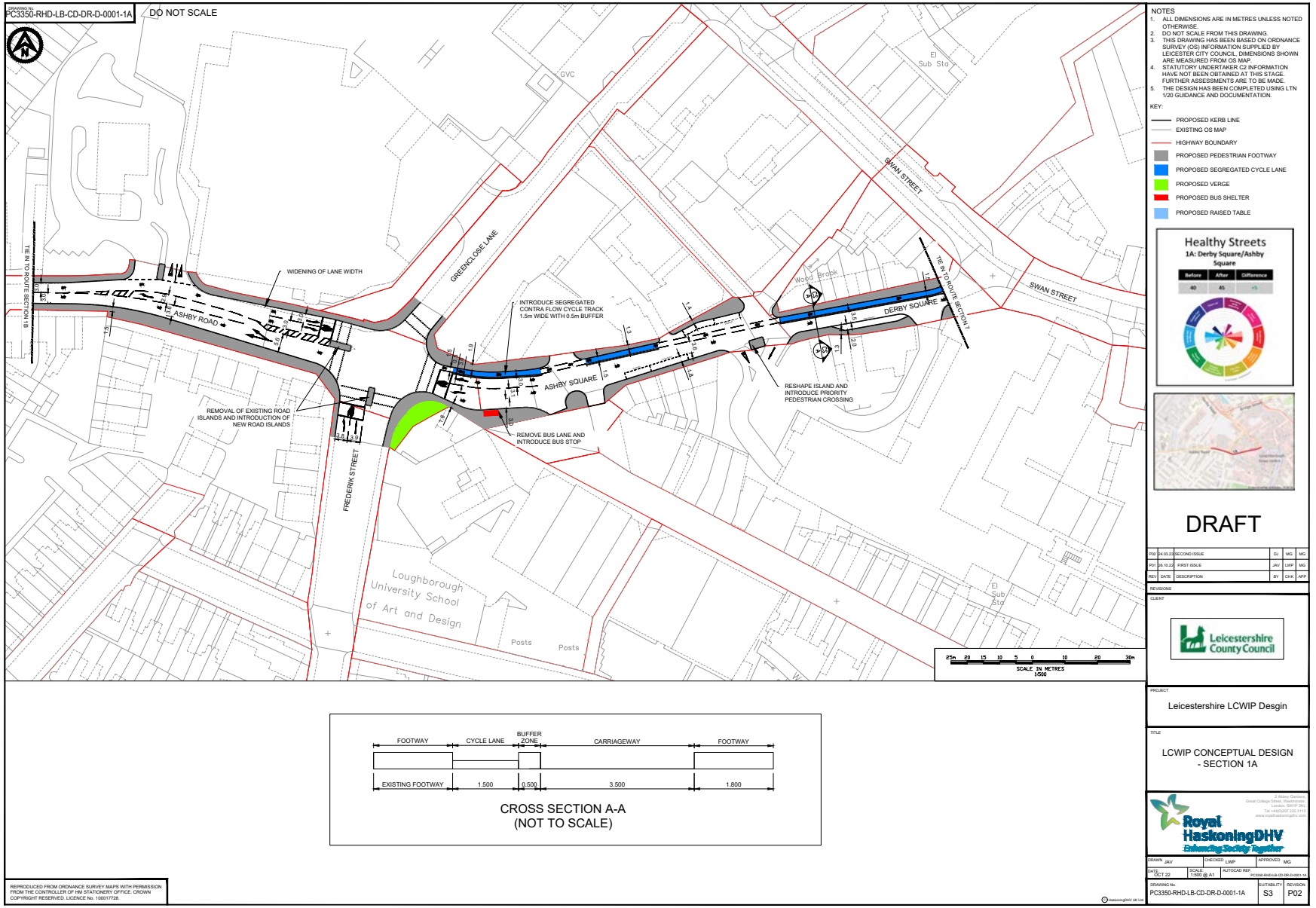
	Effectiveness				Attractiveness	Policy							Economic		Deliverability	Prioritisation	
Scheme	1a. Potential to encourage new walking trips	1b. Potential to encourage new cycling trips	2. Population who directly benefit from the intervention	3. Potential to improve road safety	4. Healthy Streets score	5a. Improvement in air quality -proximity to an AQMA area	5b. Improvement in air quality - PBCC car emissions	5. Air Quality (5a and 5b Average)	6. Links to / through an area of deprivation	7. Proximity to schools / education	8. Priority / importance of the intervention as defined through the engagement process	9. Improved multimodal transport connections	10. Value for money	11. Proximity to a major growth site	12. Scheme feasibility	Total Score	Rank
4G	0	0	0	0	2	0	0	0	2	0	0.6	0	3	0	3	10.6	18
6A	2	0	1	2	1	0	0	0	3	1	0.3	1	3	2	0	16.3	8
6B	2	0	1	1	2	0	0	0	3	1	0.5	2	3	2	3	20.5	2
6C	2	0	0	0	1	0	0	0	3	0	0.4	3	3	2	3	17.4	4
7	3	0	1	1	0	3	0	1.5	1	1	0.7	0	3	1	0	13.2	16
8	2	0	1	2	0	0	0	0	3	1	0.5	0	3	2	0	14.5	13
10	1	3	1	0	1	0	0	0	1	2	0.3	0	2	0	3	14.3	14
22	2	2	1	2	1	3	0	1.5	1	1	0.3	0	0	0	0	11.8	17

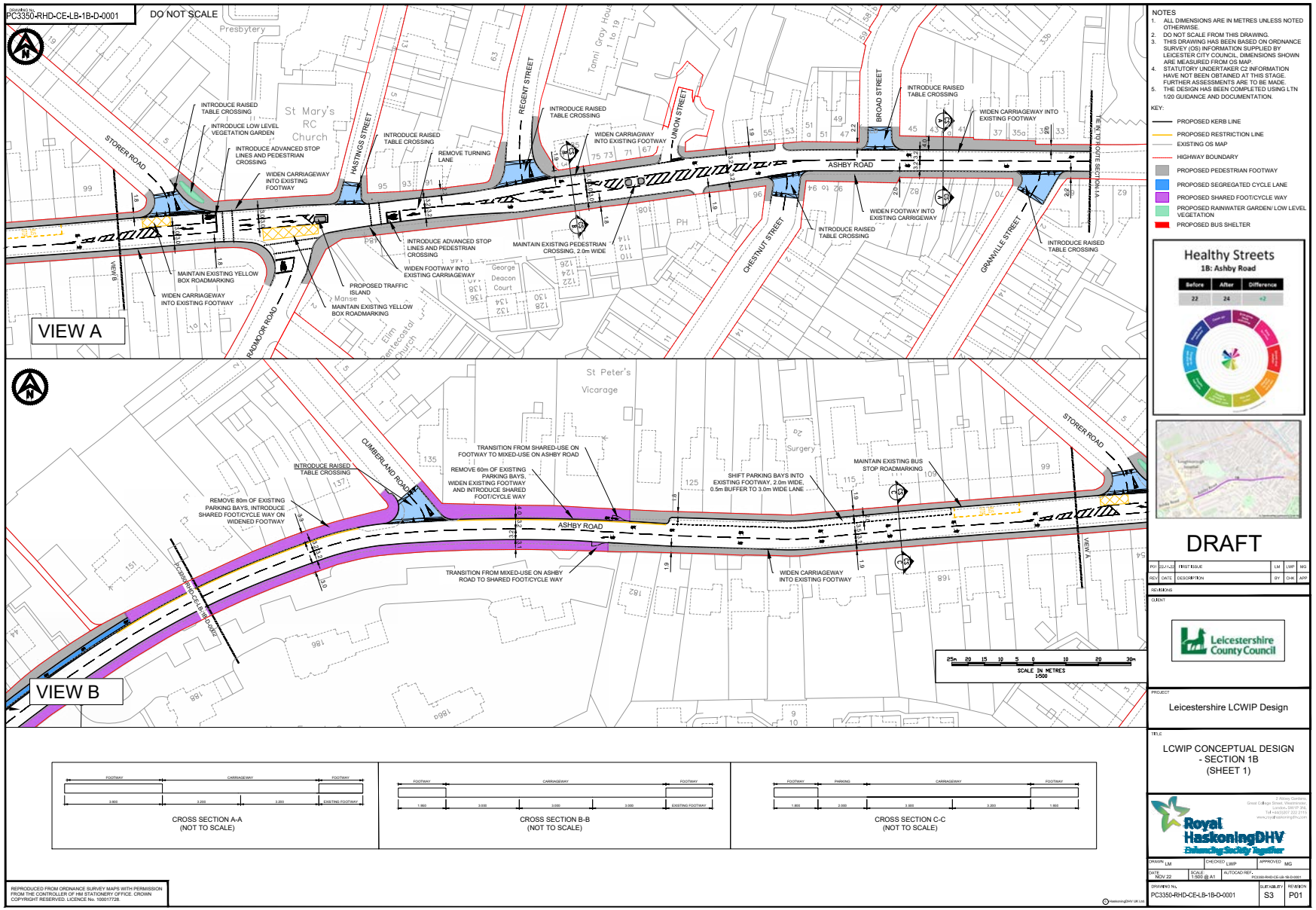
* The scores for criteria 8 and the total scores have been rounded to 1 d.p.

14. Appendix E – Concept designs



The concept drawings included below are shown for illustrative purposes only. They are intended purely to show how aspects of the latest design standards, such as LTN1/20, could be applied to improve the cycling, walking and wheeling routes in the LCWIP area. They are not final definitive schemes. The design of the actual final deliverable schemes will be subject to the amount of funding available, considerations around affordability of long-term maintenance, further stages of detailed design and importantly, further rounds of public stakeholder engagement.


DRAWING No.
PC3350-RHD-LB-CD-DR-D-0001-1A
DO NOT SCALE
TIE IN TO ROUTE SECTION 1B
ASHBY ROAD
WIDENING OF LANE WIDTH
GREENCLOSE LANE
INTRODUCE SEGREGATED CONTRA FLOW CYCLE TRACK 1.5m WIDE WITH 0.5m BUFFER
ASHBY SQUARE
REMOVAL OF EXISTING ROAD ISLANDS AND INTRODUCTION OF NEW ROAD ISLANDS
FREDERIK STREET
REMOVE BUS LANE AND INTRODUCE BUS STOP
RESHAPE ISLAND AND INTRODUCE PRIORITY PEDESTRIAN CROSSING
DERBY SQUARE
TIE IN TO ROUTE SECTION 1
SWAN STREET
Loughborough University School of Art and Design
Posts
Posts
SCALE IN METRES
1:500
FOOTWAY
CYCLE LANE
BUFFER ZONE
CARRIAGEWAY
FOOTWAY
EXISTING FOOTWAY
1.500
0.500
3.500
1.800
CROSS SECTION A-A
(NOT TO SCALE)
NOTES
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING.
3. THIS DRAWING HAS BEEN BASED ON ORDNANCE SURVEY (OS) INFORMATION SUPPLIED BY LEICESTER CITY COUNCIL. DIMENSIONS SHOWN ARE MEASURED FROM OS MAP.
4. STATUTORY UNDERTAKER C2 INFORMATION HAVE NOT BEEN OBTAINED AT THIS STAGE. FURTHER ASSESSMENTS ARE TO BE MADE.
5. THE DESIGN HAS BEEN COMPLETED USING LTN 1/20 GUIDANCE AND DOCUMENTATION.
KEY:
PROPOSED KERB LINE
EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED VERGE
PROPOSED BUS SHELTER
PROPOSED RAISED TABLE
Healthy Streets
1A: Derby Square/Ashby Square
Before
After
Difference
40
45
+5
DRAFT
P02 04.03.23 SECOND ISSUE DJ MG MG
P01 06.10.22 FIRST ISSUE JAV LWP MG
REV. DATE DESCRIPTION BY CHK APP
REVISIONS
CLIENT
Leicestershire County Council
PROJECT
Leicestershire LCWIP Desgin
TITLE
LCWIP CONCEPTUAL DESIGN - SECTION 1A
Royal HaskoningDHV
Enhancing Society Together
DRAWN JAV
CHECKED LWP
APPROVED MG
DATE OCT 22
SCALE 1:500 @ A1
AUTOCAD REF PC3350-RHD-LB-CD-DR-D-0001-1A
DRAWING No. PC3350-RHD-LB-CD-DR-D-0001-1A
SUITABILITY S3
REVISION P02
REPRODUCED FROM ORDNANCE SURVEY MAPS WITH PERMISSION FROM THE CONTROLLER OF HM STATIONERY OFFICE. CROWN COPYRIGHT RESERVED. LICENCE No. 100017728.


PC3350-RHD-CE-LB-1B-D-0001
DO NOT SCALE
VIEW A
VIEW B
ASHBY ROAD
STORER ROAD
HASTINGS STREET
REGENT STREET
UNION STREET
BROAD STREET
CHESTNUT STREET
GRANVILLE STREET
RADMOOR ROAD
CUMBERLAND ROAD
INTRODUCE RAISED TABLE CROSSING
INTRODUCE LOW LEVEL VEGETATION GARDEN
INTRODUCE ADVANCED STOP LINES AND PEDESTRIAN CROSSING
WIDEN CARRIAGEWAY INTO EXISTING FOOTWAY
REMOVE TURNING LANE
WIDEN CARRIAGEWAY INTO EXISTING FOOTWAY
WIDEN FOOTWAY INTO EXISTING CARRIAGEWAY
MAINTAIN EXISTING PEDESTRIAN CROSSING, 2.0m WIDE
WIDEN FOOTWAY INTO EXISTING CARRIAGEWAY
INTRODUCE RAISED TABLE CROSSING
MAINTAIN EXISTING YELLOW BOX ROADMARKING
WIDEN CARRIAGEWAY INTO EXISTING FOOTWAY
PROPOSED TRAFFIC ISLAND
MAINTAIN EXISTING YELLOW BOX ROADMARKING
TRANSITION FROM SHARED-USE ON FOOTWAY TO MIXED-USE ON ASHBY ROAD
REMOVE 60m OF EXISTING PARKING BAYS, WIDEN EXISTING FOOTWAY AND INTRODUCE SHARED FOOT/CYCLE WAY
SHIFT PARKING BAYS INTO EXISTING FOOTWAY, 2.0m WIDE, 0.5m BUFFER TO 3.0m WIDE LANE
MAINTAIN EXISTING BUS STOP ROADMARKING
INTRODUCE RAISED TABLE CROSSING
REMOVE 80m OF EXISTING PARKING BAYS, INTRODUCE SHARED FOOT/CYCLE WAY ON WIDENED FOOTWAY
TRANSITION FROM MIXED-USE ON ASHBY ROAD TO SHARED FOOT/CYCLE WAY
WIDEN CARRIAGEWAY INTO EXISTING FOOTWAY
SCALE IN METRES 1:500
CROSS SECTION A-A (NOT TO SCALE)
CROSS SECTION B-B (NOT TO SCALE)
CROSS SECTION C-C (NOT TO SCALE)
NOTES
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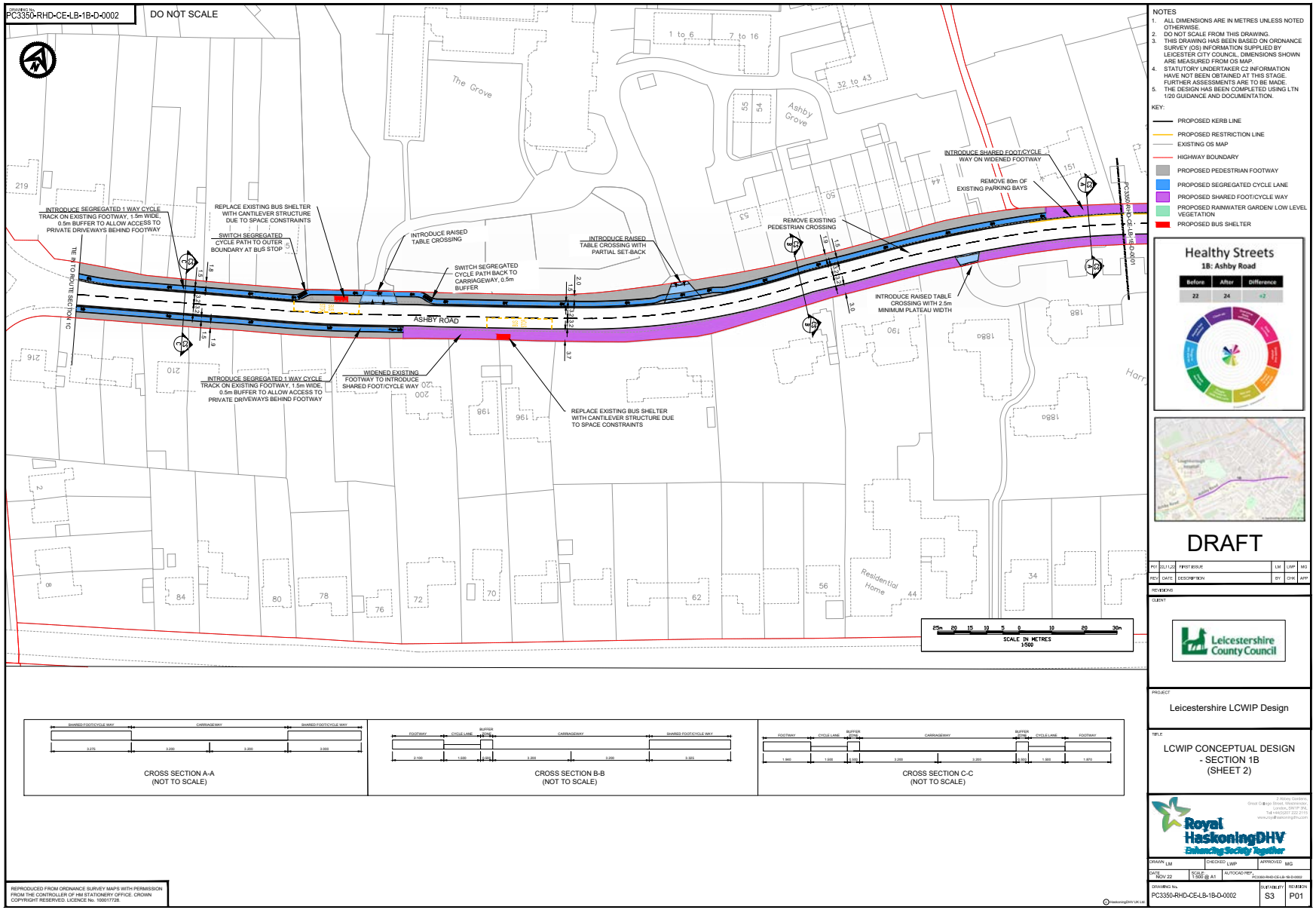
KEY:
PROPOSED KERB LINE
PROPOSED RESTRICTION LINE
EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED SHARED FOOT/CYCLE WAY
PROPOSED RAINWATER GARDEN/ LOW LEVEL VEGETATION
PROPOSED BUS SHELTER
Healthy Streets
1B: Ashby Road
Before 22
After 24
Difference +2
DRAFT
Leicestershire County Council
Leicestershire LCWIP Design
LCWIP CONCEPTUAL DESIGN - SECTION 1B (SHEET 1)
Royal HaskoningDHV
PC3350-RHD-CE-LB-1B-D-0001
S3
P01
REPRODUCED FROM ORDNANCE SURVEY MAPS WITH PERMISSION FROM THE CONTROLLER OF HM STATIONERY OFFICE. CROWN COPYRIGHT RESERVED. LICENCE No. 100017726.


DRAWING No.
PC3350-RHD-CE-LB-1B-D-0002
DO NOT SCALE
The Grove
Ashby Grove
ASHBY ROAD
INTRODUCE SEGREGATED 1 WAY CYCLE TRACK ON EXISTING FOOTWAY, 1.5m WIDE, 0.5m BUFFER TO ALLOW ACCESS TO PRIVATE DRIVEWAYS BEHIND FOOTWAY
REPLACE EXISTING BUS SHELTER WITH CANTILEVER STRUCTURE DUE TO SPACE CONSTRAINTS
SWITCH SEGREGATED CYCLE PATH TO OUTER BOUNDARY AT BUS STOP
INTRODUCE RAISED TABLE CROSSING
SWITCH SEGREGATED CYCLE PATH BACK TO CARRIAGEWAY, 0.5m BUFFER
INTRODUCE RAISED TABLE CROSSING WITH PARTIAL SET-BACK
INTRODUCE SHARED FOOT/CYCLE WAY ON WIDENED FOOTWAY
REMOVE 80m OF EXISTING PARKING BAYS
REMOVE EXISTING PEDESTRIAN CROSSING
INTRODUCE RAISED TABLE CROSSING WITH 2.5m MINIMUM PLATEAU WIDTH
TIE IN TO ROUTE SECTION 1C
INTRODUCE SEGREGATED 1 WAY CYCLE TRACK ON EXISTING FOOTWAY, 1.5m WIDE, 0.5m BUFFER TO ALLOW ACCESS TO PRIVATE DRIVEWAYS BEHIND FOOTWAY
WIDENED EXISTING FOOTWAY TO INTRODUCE SHARED FOOT/CYCLE WAY
REPLACE EXISTING BUS SHELTER WITH CANTILEVER STRUCTURE DUE TO SPACE CONSTRAINTS
PC3350-RHD-CE-LB-1B-D-0001
Residential Home
SCALE IN METRES
1:500
CROSS SECTION A-A
(NOT TO SCALE)
CROSS SECTION B-B
(NOT TO SCALE)
CROSS SECTION C-C
(NOT TO SCALE)
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NOTES
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KEY:
PROPOSED KERB LINE
PROPOSED RESTRICTION LINE
EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED SHARED FOOT/CYCLE WAY
PROPOSED RAINWATER GARDEN/ LOW LEVEL VEGETATION
PROPOSED BUS SHELTER
Healthy Streets
1B: Ashby Road
Before
After
Difference
22
24
+2
DRAFT
P01 22.11.22 FIRST ISSUE LM LWP MG
REV DATE DESCRIPTION BY CHK APP
REVISIONS
CLIENT
Leicestershire County Council
PROJECT
Leicestershire LCWIP Design
TITLE
LCWIP CONCEPTUAL DESIGN - SECTION 1B (SHEET 2)
Royal HaskoningDHV
Enhancing Society Together
DRAWN LM
CHECKED LWP
APPROVED MG
DATE NOV 22
SCALE 1:500 @ A1
AUTOCAD REF. PC3350-RHD-CE-LB-1B-D-0002
DRAWING No. PC3350-RHD-CE-LB-1B-D-0002
SUITABILITY S3
REVISION P01

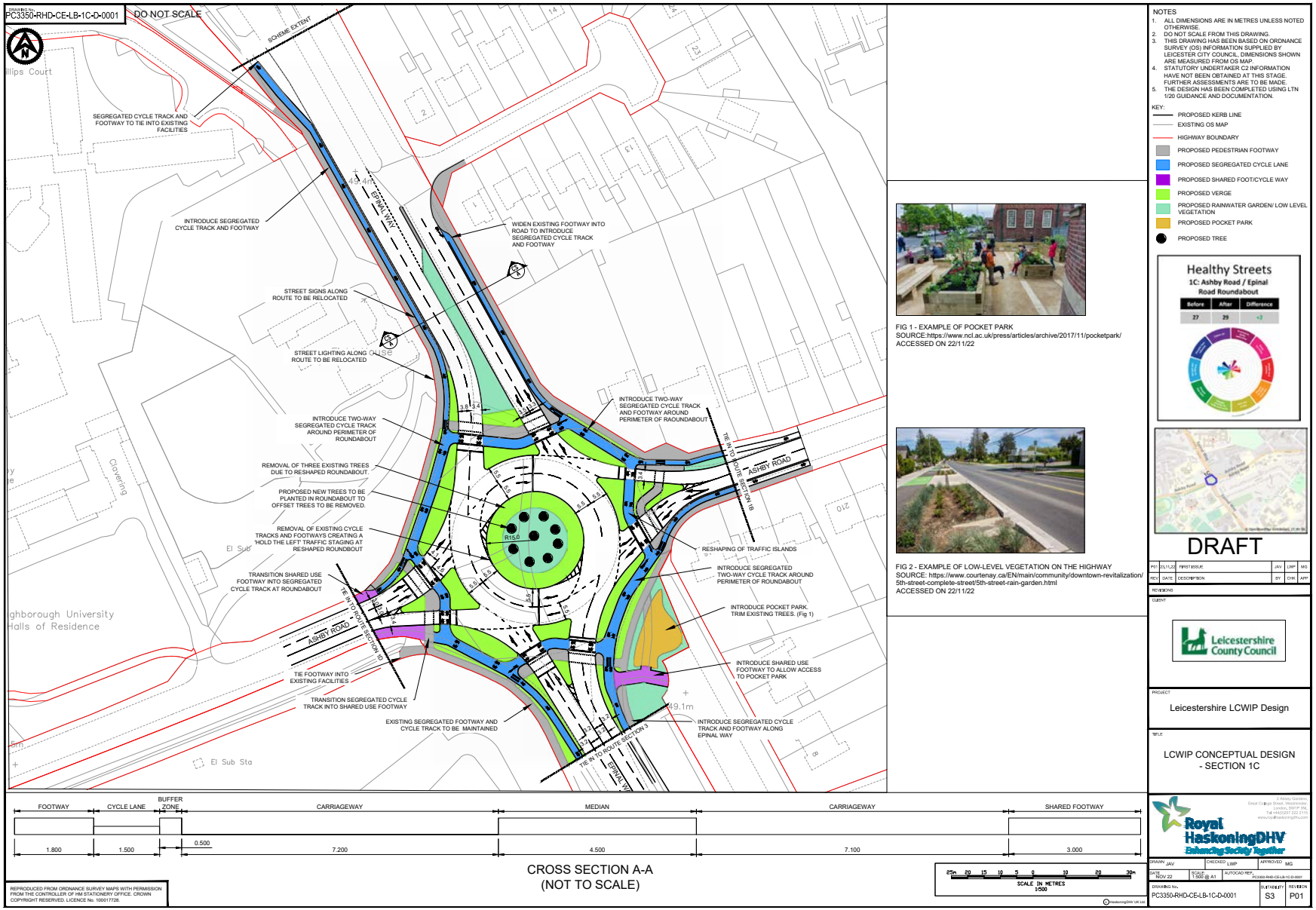

FIG 1 - EXAMPLE OF POCKET PARK
SOURCE:https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 22/11/22

FIG 2 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 22/11/22

NOTES
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KEY:
- PROPOSED KERB LINE
- EXISTING OS MAP
- HIGHWAY BOUNDARY
- PROPOSED PEDESTRIAN FOOTWAY
- PROPOSED SEGREGATED CYCLE LANE
- PROPOSED SHARED FOOT/CYCLE WAY
- PROPOSED VERGE
- PROPOSED RAINWATER GARDEN/ LOW LEVEL VEGETATION
- PROPOSED POCKET PARK
- PROPOSED TREE

DRAFT

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	25.11.22	FIRST ISSUE	JAV	LWP	MG

REVISIONS

CLIENT: Leicestershire County Council

PROJECT: Leicestershire LCWIP Design

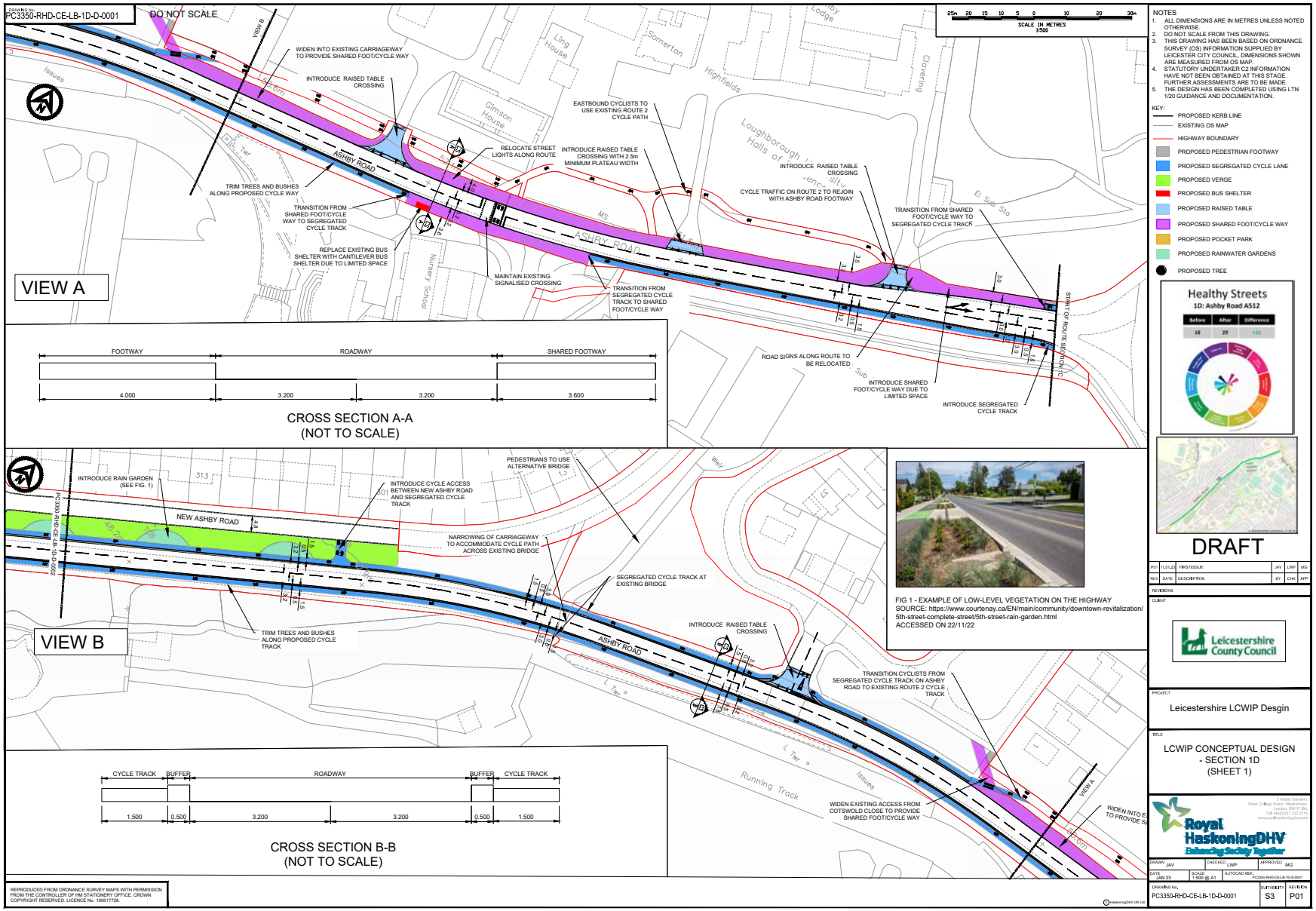
TITLE: LCWIP CONCEPTUAL DESIGN - SECTION 1C

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
JAV	LWP	MG

DATE	SCALE	AUTOCAD REF.
NOV 22	1:500 @ A1	PC3350-RHD-CE-LB-1C-D-0001

DRAWING No.	SUITABILITY	REVISION
PC3350-RHD-CE-LB-1C-D-0001	S3	P01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DO NOT SCALE
SCALE IN METRES 1:500
NOTES
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EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED VERGE
PROPOSED BUS SHELTER
PROPOSED RAISED TABLE
PROPOSED SHARED FOOT/CYCLE WAY
PROPOSED POCKET PARK
PROPOSED RAINWATER GARDENS
PROPOSED TREE
VIEW A
WIDEN INTO EXISTING CARRIAGEWAY TO PROVIDE SHARED FOOT/CYCLE WAY
INTRODUCE RAISED TABLE CROSSING
RELOCATE STREET LIGHTS ALONG ROUTE
EASTBOUND CYCLISTS TO USE EXISTING ROUTE 2 CYCLE PATH
INTRODUCE RAISED TABLE CROSSING WITH 2.5m MINIMUM PLATEAU WIDTH
INTRODUCE RAISED TABLE CROSSING
CYCLE TRAFFIC ON ROUTE 2 TO REJOIN WITH ASHBY ROAD FOOTWAY
TRANSITION FROM SHARED FOOT/CYCLE WAY TO SEGREGATED CYCLE TRACK
TRIM TREES AND BUSHES ALONG PROPOSED CYCLE WAY
TRANSITION FROM SHARED FOOT/CYCLE WAY TO SEGREGATED CYCLE TRACK
REPLACE EXISTING BUS SHELTER WITH CANTILEVER BUS SHELTER DUE TO LIMITED SPACE
MAINTAIN EXISTING SIGNALISED CROSSING
TRANSITION FROM SEGREGATED CYCLE TRACK TO SHARED FOOT/CYCLE WAY
ROAD SIGNS ALONG ROUTE TO BE RELOCATED
INTRODUCE SHARED FOOT/CYCLE WAY DUE TO LIMITED SPACE
INTRODUCE SEGREGATED CYCLE TRACK
START OF ROUTE SECTION 1C
ASHBY ROAD
FOOTWAY
ROADWAY
SHARED FOOTWAY
4.000
3.200
3.200
3.600
CROSS SECTION A-A
(NOT TO SCALE)
VIEW B
INTRODUCE RAIN GARDEN (SEE FIG. 1)
NEW ASHBY ROAD
INTRODUCE CYCLE ACCESS BETWEEN NEW ASHBY ROAD AND SEGREGATED CYCLE TRACK
PEDESTRIANS TO USE ALTERNATIVE BRIDGE
NARROWING OF CARRIAGEWAY TO ACCOMMODATE CYCLE PATH ACROSS EXISTING BRIDGE
SEGREGATED CYCLE TRACK AT EXISTING BRIDGE
TRIM TREES AND BUSHES ALONG PROPOSED CYCLE TRACK
INTRODUCE RAISED TABLE CROSSING
TRANSITION CYCLISTS FROM SEGREGATED CYCLE TRACK ON ASHBY ROAD TO EXISTING ROUTE 2 CYCLE TRACK
WIDEN EXISTING ACCESS FROM COTSWOLD CLOSE TO PROVIDE SHARED FOOT/CYCLE WAY
CYCLE TRACK
BUFFER
ROADWAY
BUFFER
CYCLE TRACK
1.500
0.500
3.200
3.200
0.500
1.500
CROSS SECTION B-B
(NOT TO SCALE)
FIG 1 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 22/11/22
Healthy Streets
1D: Ashby Road A512
Before
After
Difference
18
29
+11
DRAFT
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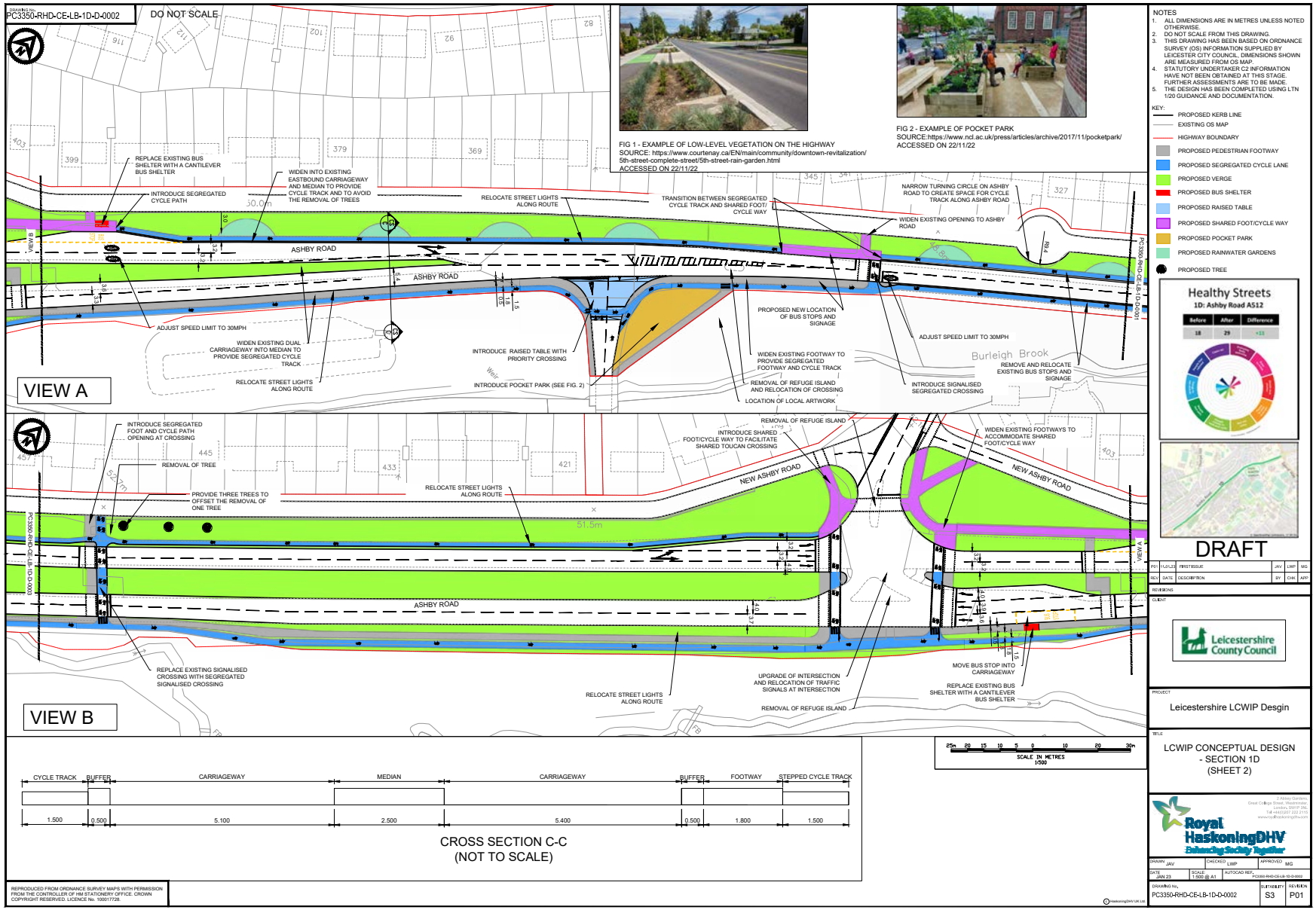
Leicestershire County Council
Leicestershire LCWIP Desgin
LCWIP CONCEPTUAL DESIGN - SECTION 1D (SHEET 1)
Royal HaskoningDHV
Enhancing Society Together
DRAWN JAV
CHECKED LWP
APPROVED MG
DATE JAN 23
SCALE 1:500 @ A1
DRAWING No. PC3350-RHD-CE-LB-1D-D-0001
SUITABILITY S3
REVISION P01


PC3350-RHD-CE-LB-1D-D-0002
DO NOT SCALE
FIG 1 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 22/11/22
FIG 2 - EXAMPLE OF POCKET PARK
SOURCE:https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 22/11/22
REPLACE EXISTING BUS SHELTER WITH A CANTILEVER BUS SHELTER
INTRODUCE SEGREGATED CYCLE PATH
WIDEN INTO EXISTING EASTBOUND CARRIAGEWAY AND MEDIAN TO PROVIDE CYCLE TRACK AND TO AVOID THE REMOVAL OF TREES
RELOCATE STREET LIGHTS ALONG ROUTE
TRANSITION BETWEEN SEGREGATED CYCLE TRACK AND SHARED FOOT/CYCLE WAY
NARROW TURNING CIRCLE ON ASHBY ROAD TO CREATE SPACE FOR CYCLE TRACK ALONG ASHBY ROAD
WIDEN EXISTING OPENING TO ASHBY ROAD
ASHBY ROAD
ADJUST SPEED LIMIT TO 30MPH
WIDEN EXISTING DUAL CARRIAGEWAY INTO MEDIAN TO PROVIDE SEGREGATED CYCLE TRACK
RELOCATE STREET LIGHTS ALONG ROUTE
INTRODUCE RAISED TABLE WITH PRIORITY CROSSING
INTRODUCE POCKET PARK (SEE FIG. 2)
PROPOSED NEW LOCATION OF BUS STOPS AND SIGNAGE
WIDEN EXISTING FOOTWAY TO PROVIDE SEGREGATED FOOTWAY AND CYCLE TRACK
REMOVAL OF REFUGE ISLAND AND RELOCATION OF CROSSING
LOCATION OF LOCAL ARTWORK
ADJUST SPEED LIMIT TO 30MPH
REMOVE AND RELOCATE EXISTING BUS STOPS AND SIGNAGE
INTRODUCE SIGNALISED SEGREGATED CROSSING
Burleigh Brook
VIEW A
INTRODUCE SEGREGATED FOOT AND CYCLE PATH OPENING AT CROSSING
REMOVAL OF TREE
PROVIDE THREE TREES TO OFFSET THE REMOVAL OF ONE TREE
RELOCATE STREET LIGHTS ALONG ROUTE
REMOVAL OF REFUGE ISLAND
INTRODUCE SHARED FOOT/CYCLE WAY TO FACILITATE SHARED TOUCAN CROSSING
WIDEN EXISTING FOOTWAYS TO ACCOMMODATE SHARED FOOT/CYCLE WAY
NEW ASHBY ROAD
ASHBY ROAD
REPLACE EXISTING SIGNALISED CROSSING WITH SEGREGATED SIGNALISED CROSSING
RELOCATE STREET LIGHTS ALONG ROUTE
UPGRADE OF INTERSECTION AND RELOCATION OF TRAFFIC SIGNALS AT INTERSECTION
MOVE BUS STOP INTO CARRIAGEWAY
REPLACE EXISTING BUS SHELTER WITH A CANTILEVER BUS SHELTER
REMOVAL OF REFUGE ISLAND
VIEW B
SCALE IN METRES 1:500
CYCLE TRACK
BUFFER
CARRIAGEWAY
MEDIAN
CARRIAGEWAY
BUFFER
FOOTWAY
STEPPED CYCLE TRACK
1.500
0.500
5.100
2.500
5.400
0.500
1.800
1.500
CROSS SECTION C-C
(NOT TO SCALE)
NOTES
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
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KEY:
PROPOSED KERB LINE
EXISTING OS MAP
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PROPOSED SEGREGATED CYCLE LANE
PROPOSED VERGE
PROPOSED BUS SHELTER
PROPOSED RAISED TABLE
PROPOSED SHARED FOOT/CYCLE WAY
PROPOSED POCKET PARK
PROPOSED RAINWATER GARDENS
PROPOSED TREE
Healthy Streets
1D: Ashby Road A512
Before
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Difference
18
29
+11
DRAFT
REVISIONS
CLIENT
Leicestershire County Council
PROJECT
Leicestershire LCWIP Desgin
TITLE
LCWIP CONCEPTUAL DESIGN - SECTION 1D (SHEET 2)
Royal HaskoningDHV
Enhancing Society Together
DRAWN JAV
CHECKED LWP
APPROVED MG
DATE JAN 23
SCALE 1:500 @ A1
DRAWING No. PC3350-RHD-CE-LB-1D-D-0002
SUITABILITY S3
REVISION P01
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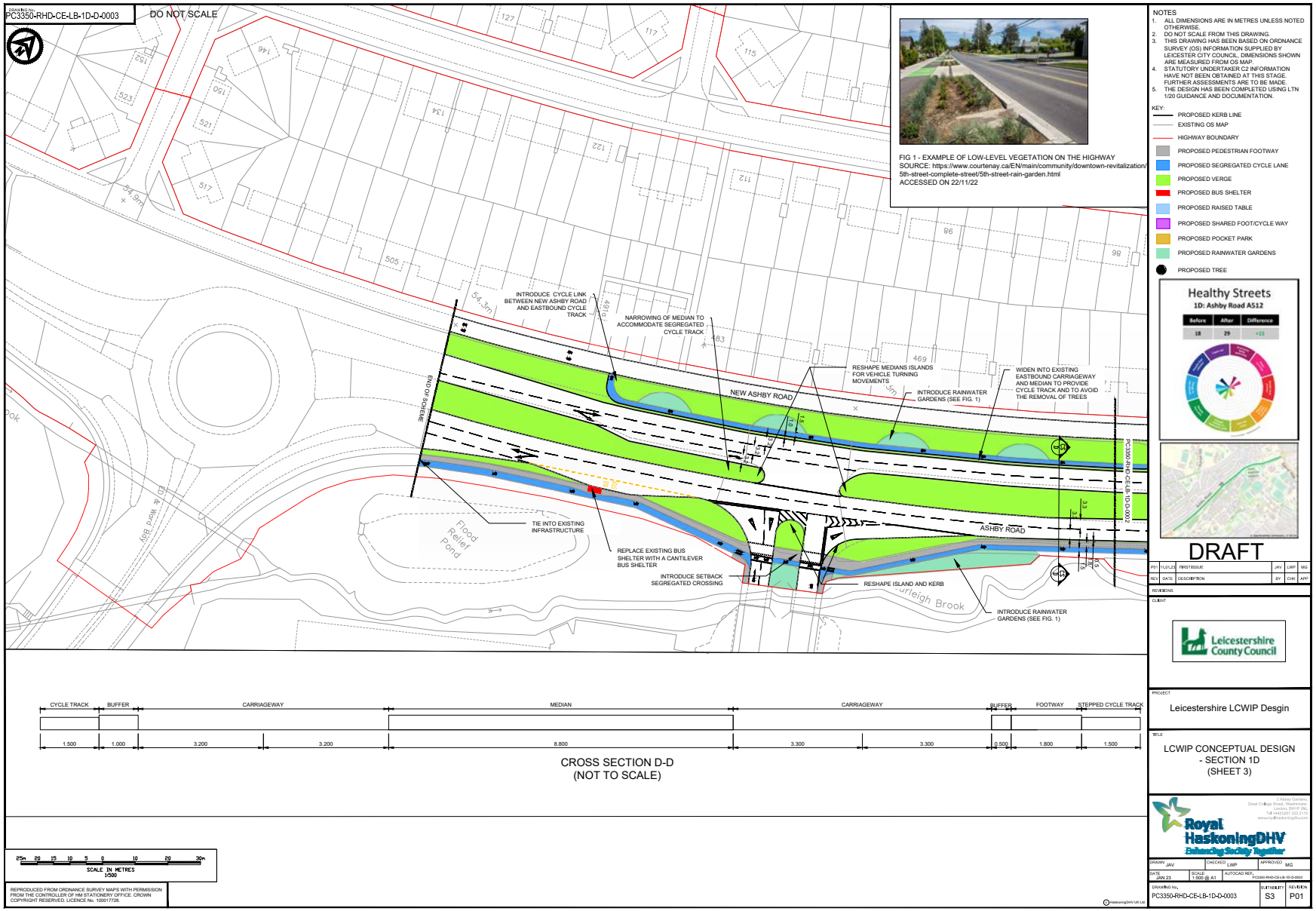

FIG 1 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 22/11/22

NOTES
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- HIGHWAY BOUNDARY
- PROPOSED PEDESTRIAN FOOTWAY
- PROPOSED SEGREGATED CYCLE LANE
- PROPOSED VERGE
- PROPOSED BUS SHELTER
- PROPOSED RAISED TABLE
- PROPOSED SHARED FOOT/CYCLE WAY
- PROPOSED POCKET PARK
- PROPOSED RAINWATER GARDENS
- PROPOSED TREE

DRAFT

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	11.01.23	FIRST ISSUE	JAV	LWP	MG

REVISIONS

CLIENT
Leicestershire County Council

PROJECT
Leicestershire LCWIP Desgin

TITLE
LCWIP CONCEPTUAL DESIGN - SECTION 1D (SHEET 3)

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
JAV	LWP	MG

DATE	SCALE	AUTOCAD REF.
JAN 23	1:500 @ A1	PC3350-RHD-CE-LB-1D-D-0003

DRAWING No.	SUITABILITY	REVISION
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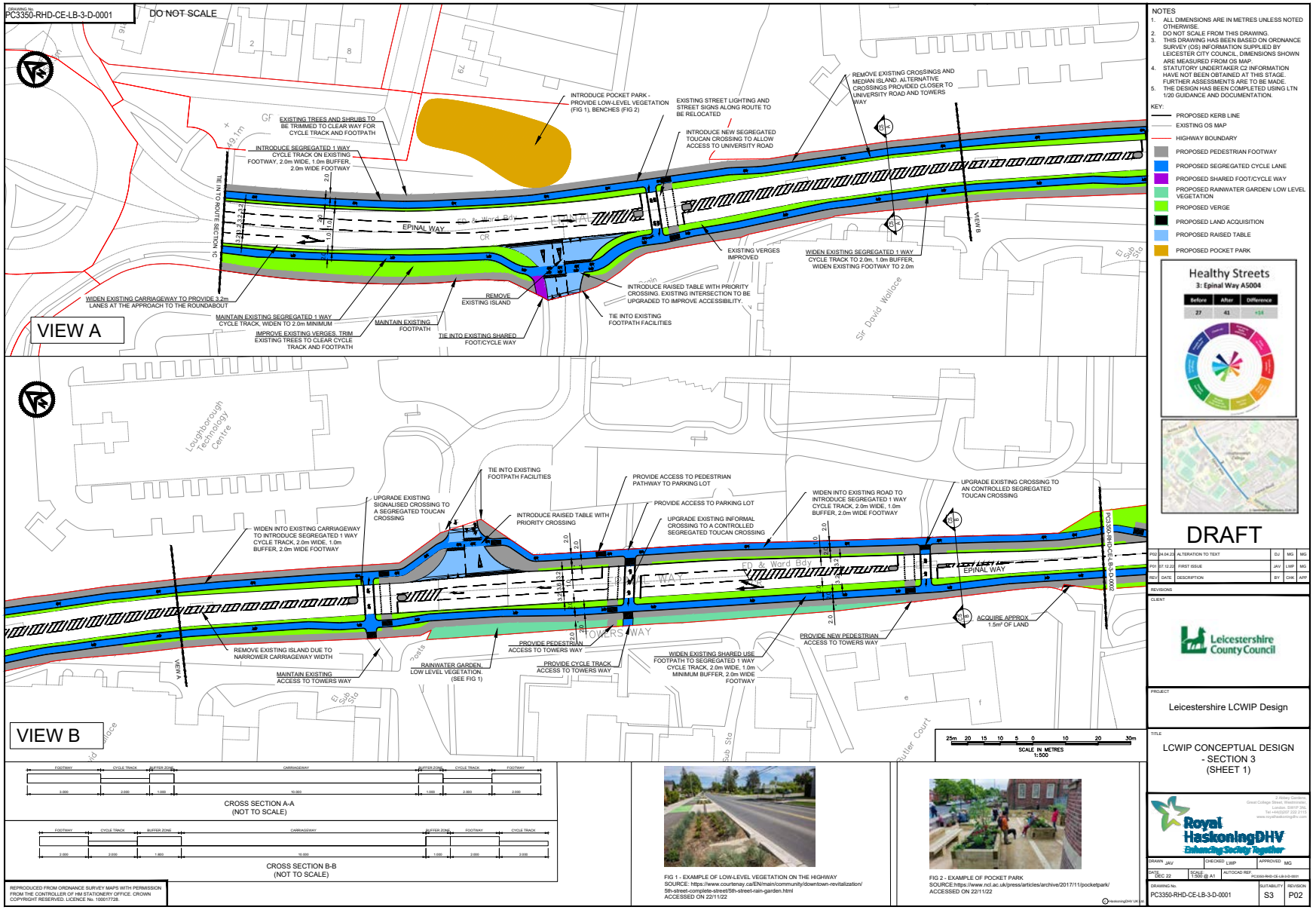

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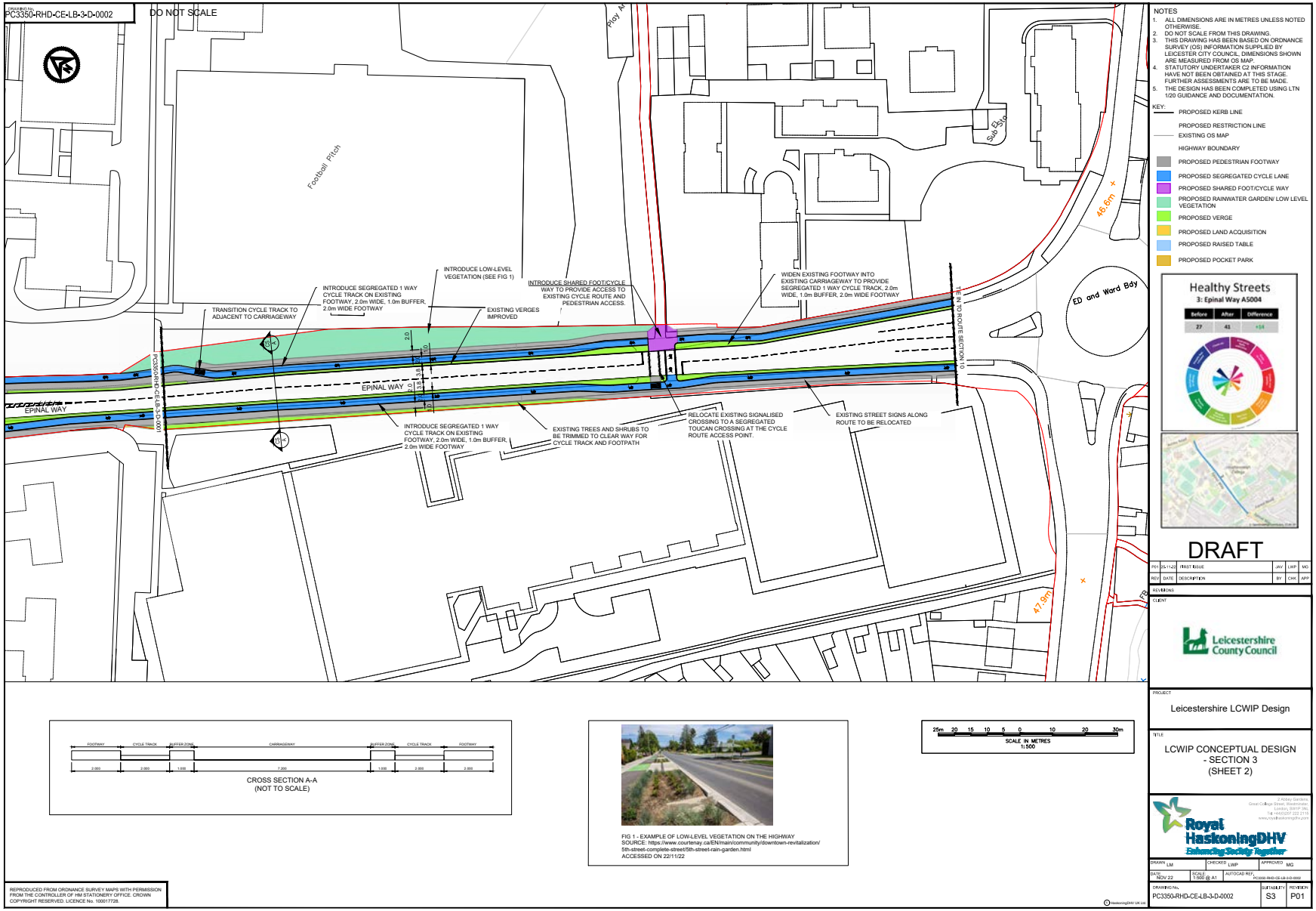
FIG 2 - EXAMPLE OF POCKET PARK
SOURCE:https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 22/11/22

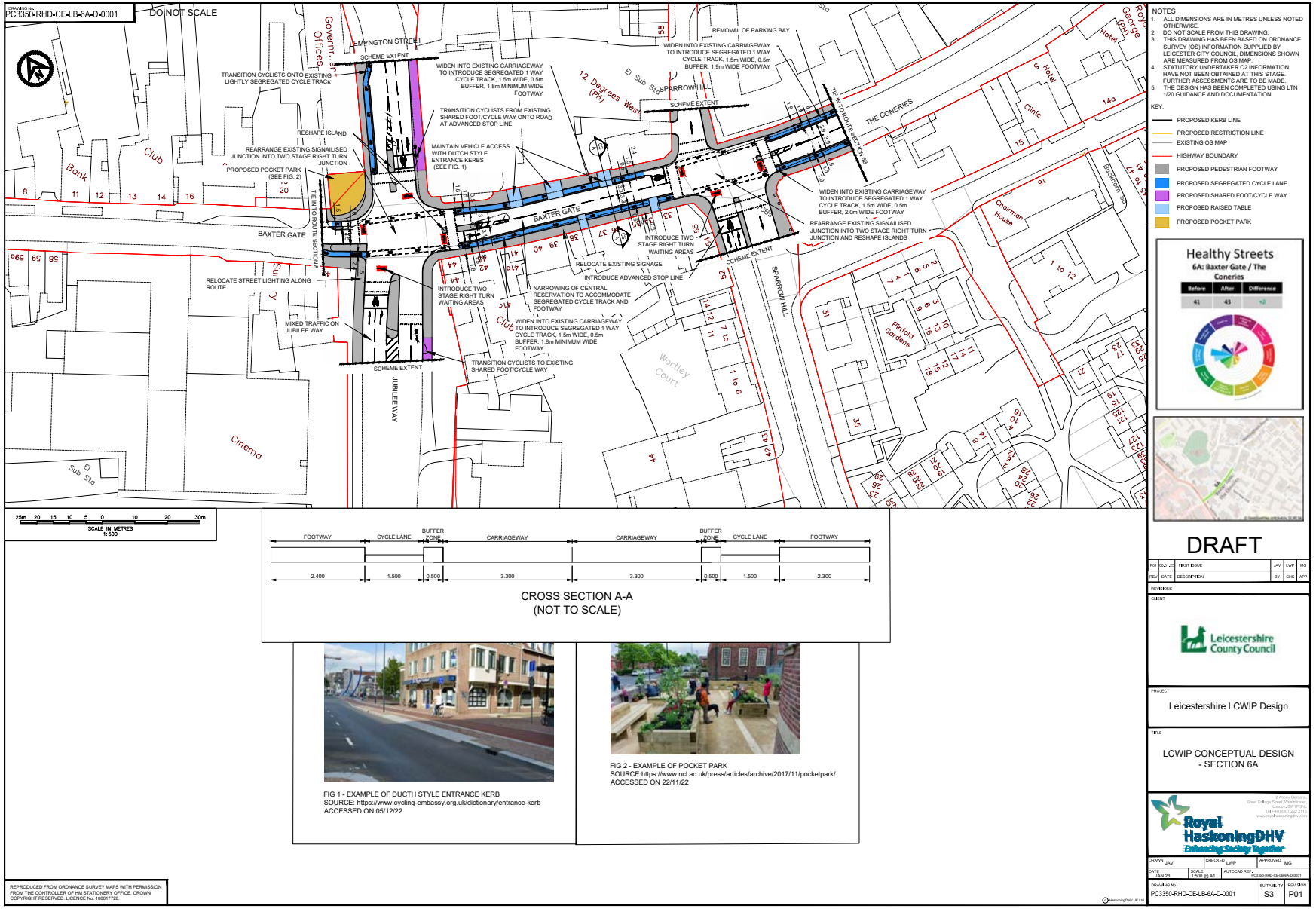


FOOTWAY | CYCLE TRACK | BUFFER ZONE | CARRIAGEWAY | BUFFER ZONE | CYCLE TRACK | FOOTWAY
2.000 | 2.000 | 1.000 | 7.200 | 1.000 | 2.000 | 2.000

CROSS SECTION A-A
(NOT TO SCALE)

FIG 1 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 22/11/22

25m 20 15 10 5 0 10 20 30m
SCALE IN METRES
1:500



CROSS SECTION A-A
(NOT TO SCALE)

FIG 1 - EXAMPLE OF DUCTH STYLE ENTRANCE KERB
SOURCE: https://www.cycling-embassy.org.uk/dictionary/entrance-kerb
ACCESSED ON 05/12/22

FIG 2 - EXAMPLE OF POCKET PARK
SOURCE:https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 22/11/22

NOTES
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5. THE DESIGN HAS BEEN COMPLETED USING LTN 1/20 GUIDANCE AND DOCUMENTATION.

KEY:
- PROPOSED KERB LINE
- PROPOSED RESTRICTION LINE
- EXISTING OS MAP
- HIGHWAY BOUNDARY
- PROPOSED PEDESTRIAN FOOTWAY
- PROPOSED SEGREGATED CYCLE LANE
- PROPOSED SHARED FOOT/CYCLE WAY
- PROPOSED RAISED TABLE
- PROPOSED POCKET PARK

Healthy Streets
6A: Baxter Gate / The Coneries

Before	After	Difference
41	43	+2

DRAFT

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	06.01.23	FIRST ISSUE	JAV	LWP	MG

REVISIONS

CLIENT: Leicestershire County Council

PROJECT: Leicestershire LCWIP Design

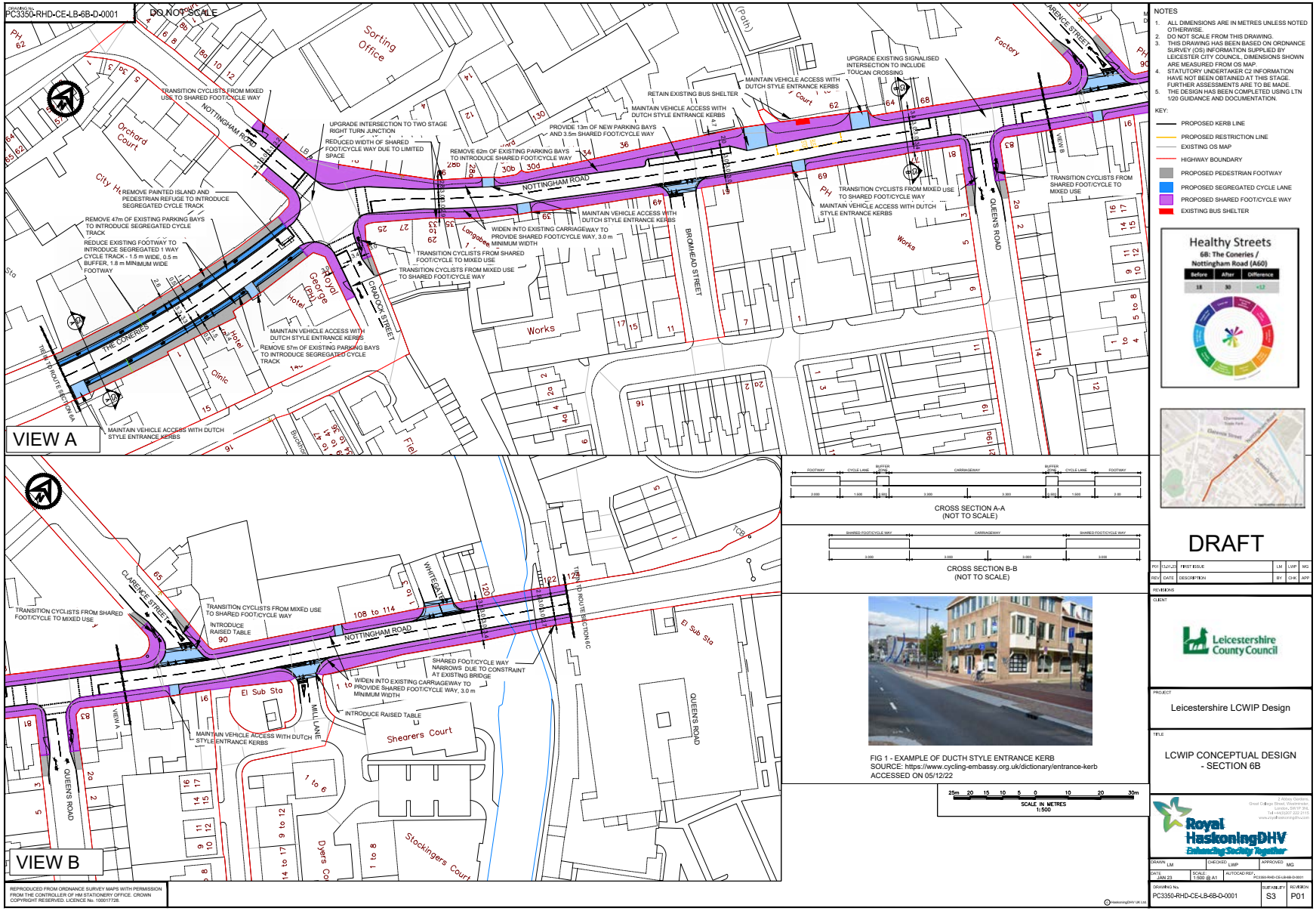
TITLE: LCWIP CONCEPTUAL DESIGN - SECTION 6A

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
JAV	LWP	MG

DATE	SCALE	AUTOCAD REF.
JAN 23	1:500 @ A1	PC3350-RHD-CE-LB-6A-D-0001

DRAWING No.	SUITABILITY	REVISION
PC3350-RHD-CE-LB-6A-D-0001	S3	P01


PC3350-RHD-CE-LB-6B-D-0001
DO NOT SCALE
VIEW A
VIEW B
NOTTINGHAM ROAD
CLARENCE STREET
QUEEN'S ROAD
BROMHEAD STREET
THE CONERIES
CRADOCK STREET
MILL LANE
Orchard Court
Sorting Office
Factory
Works
Shearers Court
Stockingers Court
Royal George (Pub)
Hotel
Clinic
El Sub Sta
TRANSITION CYCLISTS FROM MIXED USE TO SHARED FOOT/CYCLE WAY
UPGRADE INTERSECTION TO TWO STAGE RIGHT TURN JUNCTION
REDUCED WIDTH OF SHARED FOOT/CYCLE WAY DUE TO LIMITED SPACE
REMOVE 62m OF EXISTING PARKING BAYS TO INTRODUCE SHARED FOOT/CYCLE WAY
PROVIDE 13m OF NEW PARKING BAYS AND 3.5m SHARED FOOT/CYCLE WAY
RETAIN EXISTING BUS SHELTER
MAINTAIN VEHICLE ACCESS WITH DUTCH STYLE ENTRANCE KERBS
UPGRADE EXISTING SIGNALISED INTERSECTION TO INCLUDE TOUCAN CROSSING
TRANSITION CYCLISTS FROM MIXED USE TO SHARED FOOT/CYCLE WAY
TRANSITION CYCLISTS FROM SHARED FOOT/CYCLE TO MIXED USE
REMOVE PAINTED ISLAND AND PEDESTRIAN REFUGE TO INTRODUCE SEGREGATED CYCLE TRACK
REMOVE 47m OF EXISTING PARKING BAYS TO INTRODUCE SEGREGATED CYCLE TRACK
REDUCE EXISTING FOOTWAY TO INTRODUCE SEGREGATED 1 WAY CYCLE TRACK - 1.5 m WIDE, 0.5 m BUFFER, 1.8 m MINIMUM WIDE FOOTWAY
WIDEN INTO EXISTING CARRIAGEWAY TO PROVIDE SHARED FOOT/CYCLE WAY, 3.0 m MINIMUM WIDTH
TRANSITION CYCLISTS FROM SHARED FOOT/CYCLE TO MIXED USE
TRANSITION CYCLISTS FROM MIXED USE TO SHARED FOOT/CYCLE WAY
REMOVE 57m OF EXISTING PARKING BAYS TO INTRODUCE SEGREGATED CYCLE TRACK
TRANSITION CYCLISTS FROM SHARED FOOT/CYCLE TO MIXED USE
TRANSITION CYCLISTS FROM MIXED USE TO SHARED FOOT/CYCLE WAY
INTRODUCE RAISED TABLE
SHARED FOOT/CYCLE WAY NARROWS DUE TO CONSTRAINT AT EXISTING BRIDGE
WIDEN INTO EXISTING CARRIAGEWAY TO PROVIDE SHARED FOOT/CYCLE WAY, 3.0 m MINIMUM WIDTH
TRANSITION CYCLISTS FROM SHARED FOOT/CYCLE TO MIXED USE
TRANSITION CYCLISTS FROM MIXED USE TO SHARED FOOT/CYCLE WAY
INTRODUCE RAISED TABLE
MAINTAIN VEHICLE ACCESS WITH DUTCH STYLE ENTRANCE KERBS
TCB
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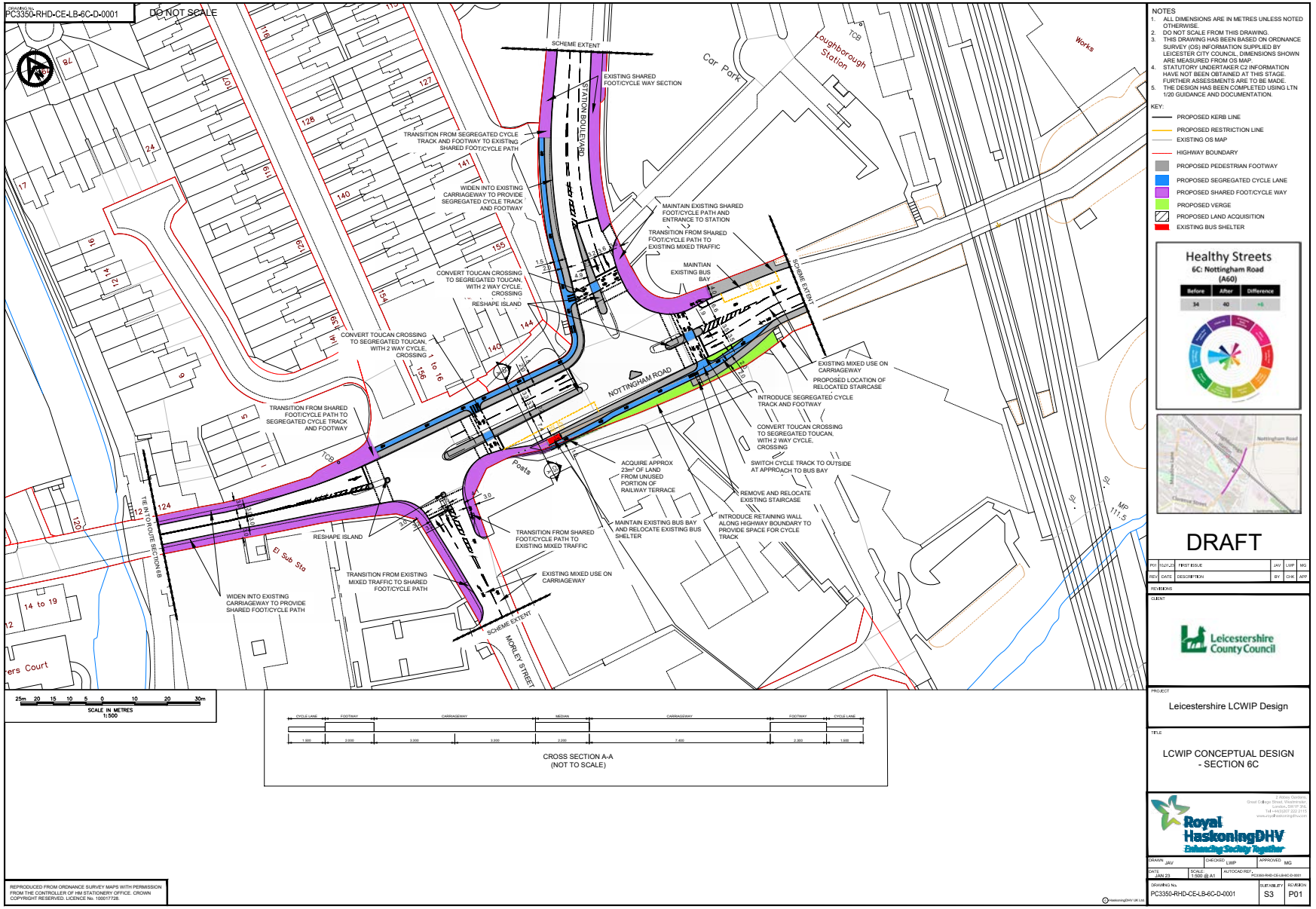
5. THE DESIGN HAS BEEN COMPLETED USING LTN 1/20 GUIDANCE AND DOCUMENTATION.
KEY:
PROPOSED KERB LINE
PROPOSED RESTRICTION LINE
EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED SHARED FOOT/CYCLE WAY
EXISTING BUS SHELTER
Healthy Streets
68: The Coneries / Nottingham Road (A60)
Before
After
Difference
18
30
+12
CROSS SECTION A-A
(NOT TO SCALE)
CROSS SECTION B-B
(NOT TO SCALE)
FIG 1 - EXAMPLE OF DUCTH STYLE ENTRANCE KERB
SOURCE: https://www.cycling-embassy.org.uk/dictionary/entrance-kerb
ACCESSED ON 05/12/22
SCALE IN METRES
1:500
DRAFT
P01 01/01/23 FIRST ISSUE LM LWP MG
REV DATE DESCRIPTION BY CHK APP
REVISIONS
CLIENT
Leicestershire County Council
PROJECT
Leicestershire LCWIP Design
TITLE
LCWIP CONCEPTUAL DESIGN - SECTION 6B
Royal HaskoningDHV
Enhancing Society Together
DRAWN LM
CHECKED LWP
APPROVED MG
DATE JAN 23
SCALE 1:500 @ A1
AUTOCAD REF. PC3350-RHD-CE-LB-6B-D-0001
DRAWING No. PC3350-RHD-CE-LB-6B-D-0001
SUITABILITY S3
REVISION P01



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KEY:
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- PROPOSED RESTRICTION LINE
- EXISTING OS MAP
- HIGHWAY BOUNDARY
- PROPOSED PEDESTRIAN FOOTWAY
- PROPOSED SEGREGATED CYCLE LANE
- PROPOSED SHARED FOOT/CYCLE WAY
- PROPOSED VERGE
- PROPOSED LAND ACQUISITION
- EXISTING BUS SHELTER

Healthy Streets
6C: Nottingham Road (A60)

Before	After	Difference
34	40	+6

DRAFT

REV	DATE	DESCRIPTION	BY	CHK	APP
P01	10.01.23	FIRST ISSUE	JAV	LWP	MG

REVISIONS

CLIENT: Leicestershire County Council

PROJECT: Leicestershire LCWIP Design

TITLE: LCWIP CONCEPTUAL DESIGN - SECTION 6C

Royal HaskoningDHV
Enhancing Society Together

DRAWN	CHECKED	APPROVED
JAV	LWP	MG

DATE	SCALE	AUTOCAD REF.
JAN 23	1:500 @ A1	PC3350-RHD-CE-LB-6C-D-0001

DRAWING No.	SUITABILITY	REVISION
PC3350-RHD-CE-LB-6C-D-0001	S3	P01

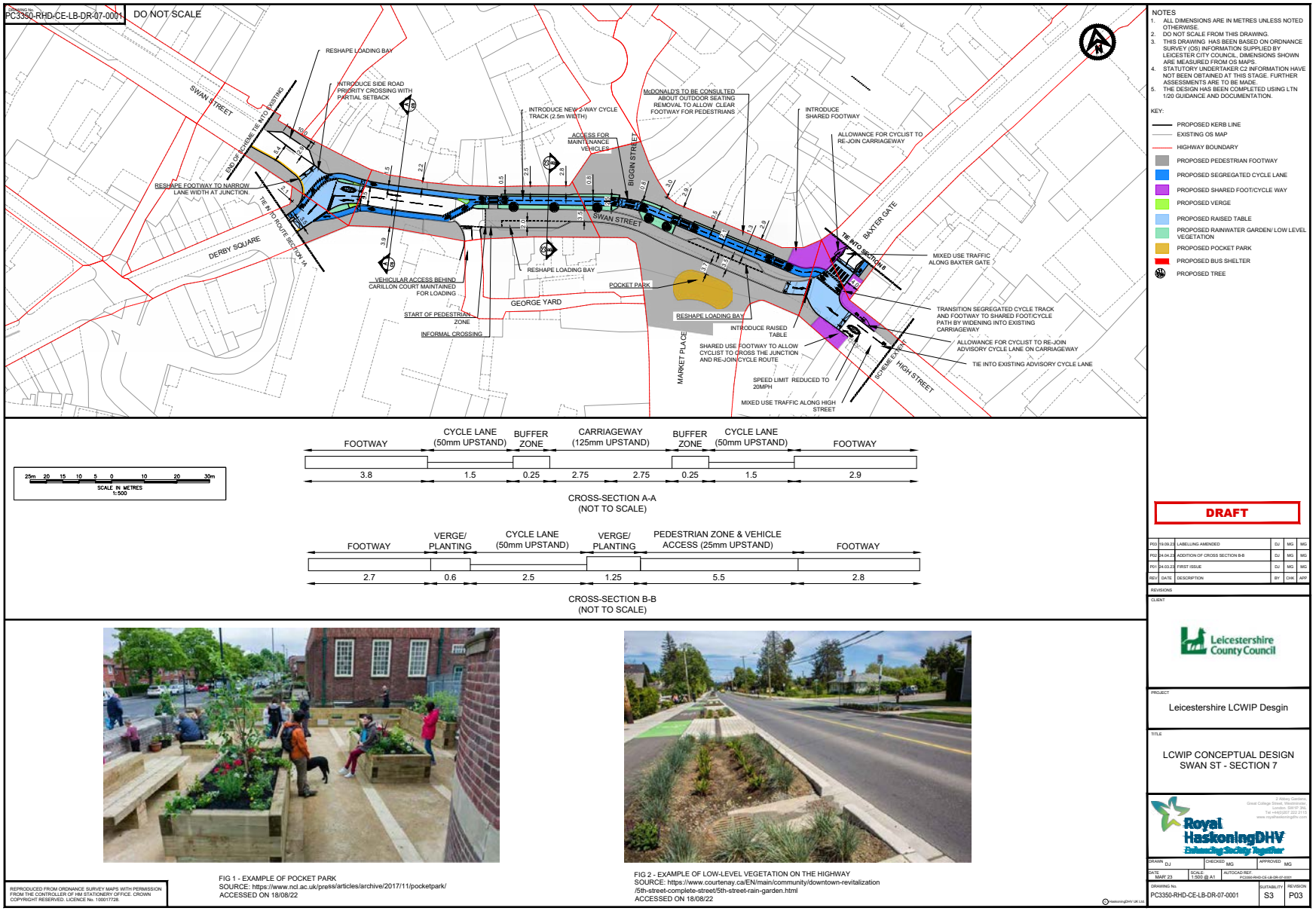


FIG 1 - EXAMPLE OF POCKET PARK
SOURCE: https://www.ncl.ac.uk/press/articles/archive/2017/11/pocketpark/
ACCESSED ON 18/08/22

FIG 2 - EXAMPLE OF LOW-LEVEL VEGETATION ON THE HIGHWAY
SOURCE: https://www.courtenay.ca/EN/main/community/downtown-revitalization/5th-street-complete-street/5th-street-rain-garden.html
ACCESSED ON 18/08/22

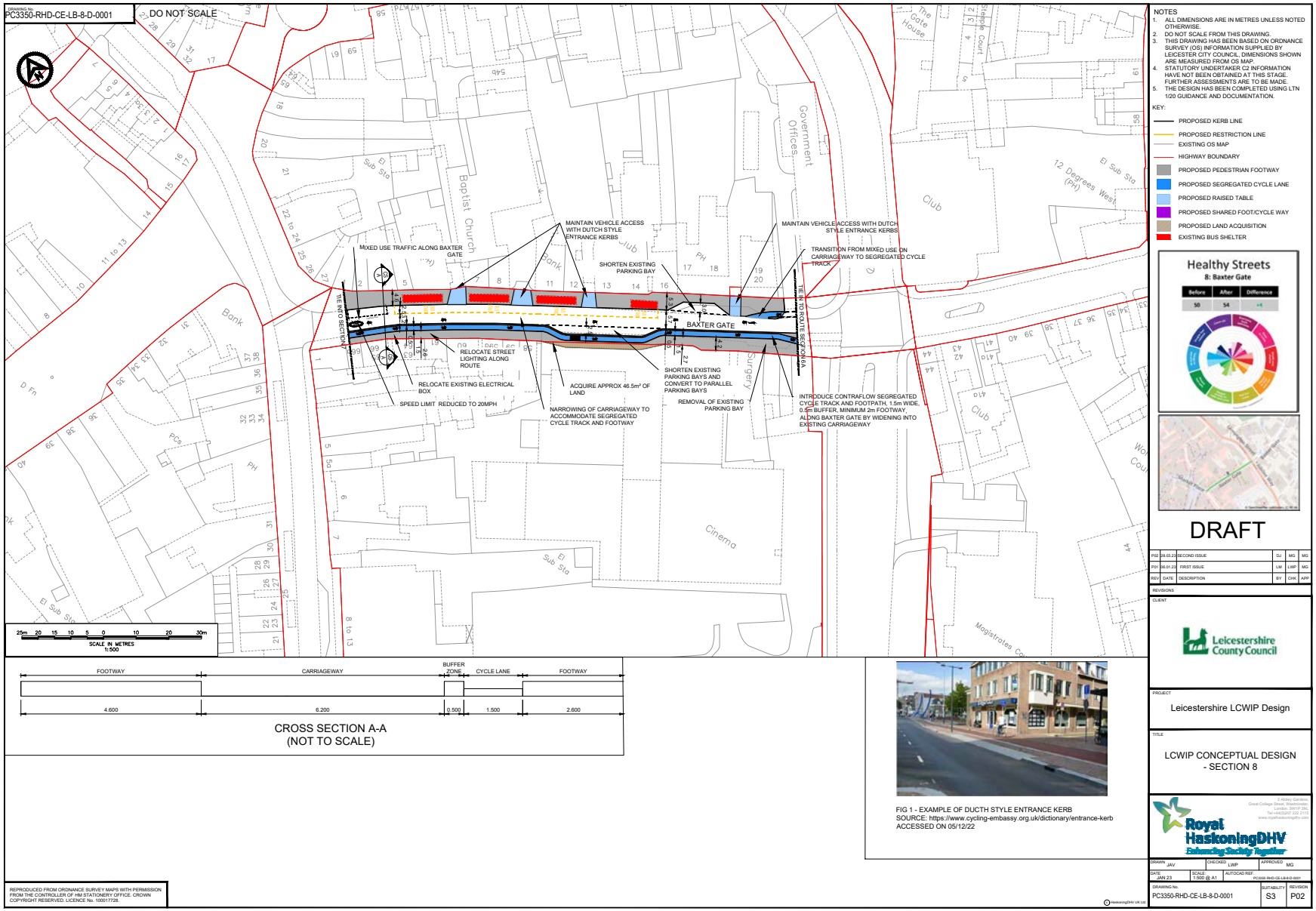
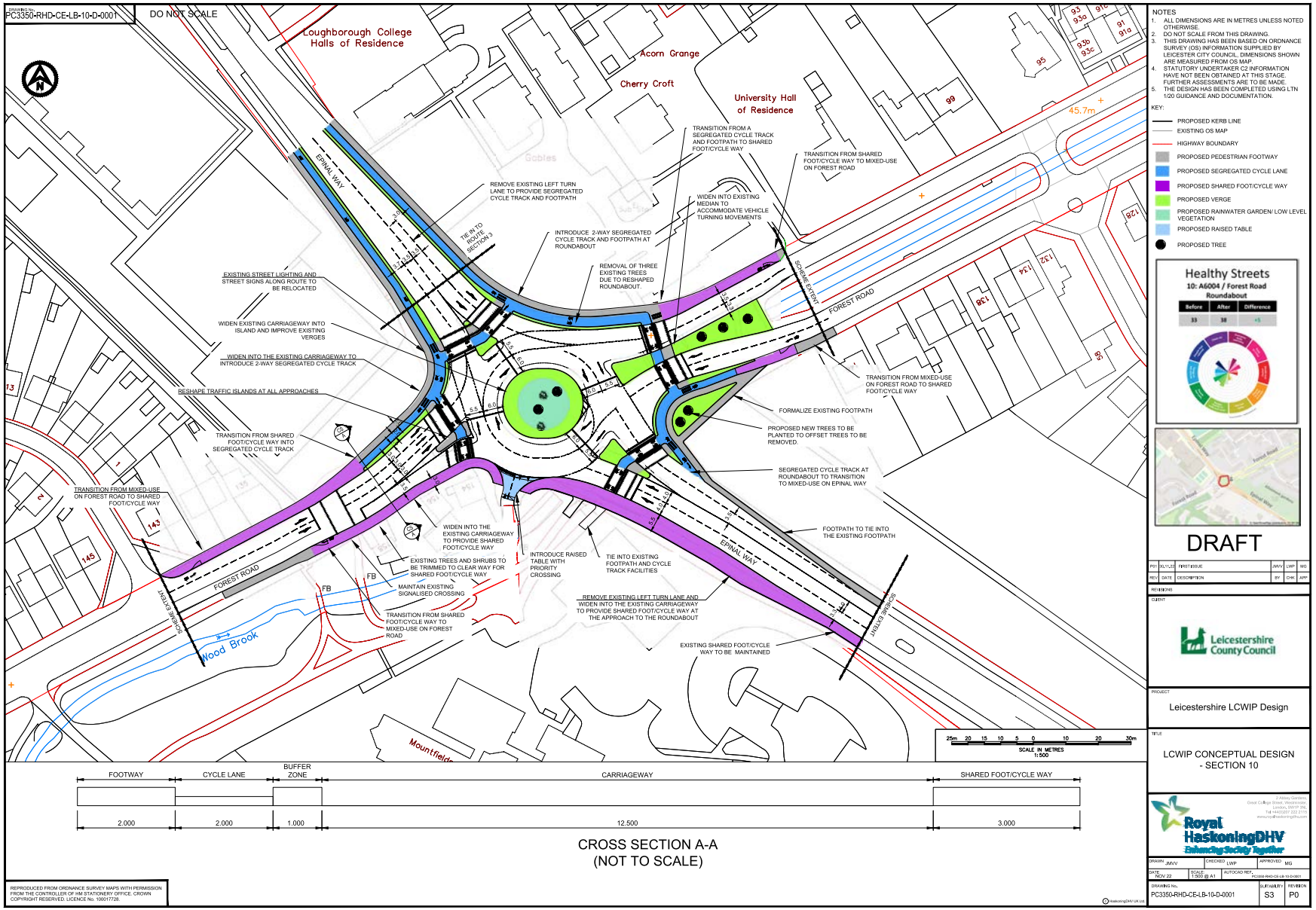


FIG 1 - EXAMPLE OF DUCTH STYLE ENTRANCE KERB
SOURCE: https://www.cycling-embassy.org.uk/dictionary/entrance-kerb
ACCESSED ON 05/12/22


PC3350-RHD-CE-LB-10-D-0001
DO NOT SCALE
Loughborough College Halls of Residence
Acorn Grange
Cherry Croft
University Hall of Residence
Gables
45.7m
EPINAL WAY
FOREST ROAD
Wood Brook
Mountfields
REMOVE EXISTING LEFT TURN LANE TO PROVIDE SEGREGATED CYCLE TRACK AND FOOTPATH
TIE IN TO RSTP SECTION 3
INTRODUCE 2-WAY SEGREGATED CYCLE TRACK AND FOOTPATH AT ROUNDABOUT
REMOVAL OF THREE EXISTING TREES DUE TO RESHAPED ROUNDABOUT.
TRANSITION FROM A SEGREGATED CYCLE TRACK AND FOOTPATH TO SHARED FOOT/CYCLE WAY
WIDEN INTO EXISTING MEDIAN TO ACCOMMODATE VEHICLE TURNING MOVEMENTS
TRANSITION FROM SHARED FOOT/CYCLE WAY TO MIXED-USE ON FOREST ROAD
SCHEME EXTENT
EXISTING STREET LIGHTING AND STREET SIGNS ALONG ROUTE TO BE RELOCATED
WIDEN EXISTING CARRIAGEWAY INTO ISLAND AND IMPROVE EXISTING VERGES
WIDEN INTO THE EXISTING CARRIAGEWAY TO INTRODUCE 2-WAY SEGREGATED CYCLE TRACK
RESHAPE TRAFFIC ISLANDS AT ALL APPROACHES
TRANSITION FROM SHARED FOOT/CYCLE WAY INTO SEGREGATED CYCLE TRACK
TRANSITION FROM MIXED-USE ON FOREST ROAD TO SHARED FOOT/CYCLE WAY
FORMALIZE EXISTING FOOTPATH
PROPOSED NEW TREES TO BE PLANTED TO OFFSET TREES TO BE REMOVED.
SEGREGATED CYCLE TRACK AT ROUNDABOUT TO TRANSITION TO MIXED-USE ON EPINAL WAY
TRANSITION FROM MIXED-USE ON FOREST ROAD TO SHARED FOOT/CYCLE WAY
FOOTPATH TO TIE INTO THE EXISTING FOOTPATH
WIDEN INTO THE EXISTING CARRIAGEWAY TO PROVIDE SHARED FOOT/CYCLE WAY
EXISTING TREES AND SHRUBS TO BE TRIMMED TO CLEAR WAY FOR SHARED FOOT/CYCLE WAY
MAINTAIN EXISTING SIGNALISED CROSSING
INTRODUCE RAISED TABLE WITH PRIORITY CROSSING
TIE INTO EXISTING FOOTPATH AND CYCLE TRACK FACILITIES
REMOVE EXISTING LEFT TURN LANE AND WIDEN INTO THE EXISTING CARRIAGEWAY TO PROVIDE SHARED FOOT/CYCLE WAY AT THE APPROACH TO THE ROUNDABOUT
TRANSITION FROM SHARED FOOT/CYCLE WAY TO MIXED-USE ON FOREST ROAD
EXISTING SHARED FOOT/CYCLE WAY TO BE MAINTAINED
SCHEME EXTENT
SCHEME EXTENT
FB
FB
SCALE IN METRES 1:500
FOOTWAY
CYCLE LANE
BUFFER ZONE
CARRIAGEWAY
SHARED FOOT/CYCLE WAY
2.000
2.000
1.000
12.500
3.000
CROSS SECTION A-A
(NOT TO SCALE)
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EXISTING OS MAP
HIGHWAY BOUNDARY
PROPOSED PEDESTRIAN FOOTWAY
PROPOSED SEGREGATED CYCLE LANE
PROPOSED SHARED FOOT/CYCLE WAY
PROPOSED VERGE
PROPOSED RAINWATER GARDEN/ LOW LEVEL VEGETATION
PROPOSED RAISED TABLE
PROPOSED TREE
Healthy Streets
10: A6004 / Forest Road Roundabout
Before
After
Difference
33
38
+5
DRAFT
P01 XX.11.22 FIRST ISSUE JMV LWP MG
REV DATE DESCRIPTION BY CHK APP
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Leicestershire County Council
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Leicestershire LCWIP Design
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LCWIP CONCEPTUAL DESIGN - SECTION 10
Royal HaskoningDHV
Enhancing Society Together
DRAWN JMV
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Leicestershire County Council

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